Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*

Midhat Mahboob

Registration # 00000329027

Master of Science in Plant Biotechnology

DEPARTMENT OF PLANT BIOTECHNOLOGY

ATTA-UR-RAHMAN SCHOOL OF APPLIED BIOSCIENCES

NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY

ISLAMABAD, PAKISTAN.

AUGUST 2022

Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*

Midhat Mahboob

Registration # 00000329027

Master of Science in Plant Biotechnology

Supervisor

Dr. Rabia Amir

Associate Professor

DEPARTMENT OF PLANT BIOTECHNOLOGY

ATTA-UR-RAHMAN SCHOOL OF APPLIED BIOSCIENCES

NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY

ISLAMABAD, PAKISTAN.

AUGUST 2022

Thesis for the award of MS Degree in Plant Biotechnology,

National University of Sciences & Technology, Islamabad.

Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*

Submitted by:

Midhat Mahboob

Reg. No: 00000329027

Supervised By

Dr. Rabia Amir

Department of Plant Biotechnology

Atta-ur-Rahman School of Applied Biosciences

(ASAB)National University of Sciences & Technology (NUST),

Islamabad

Pakistan

Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*

By

Midhat Mahboob

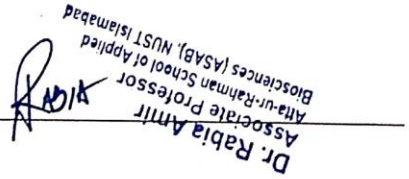
Registration # 00000329027

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Plant Biotechnology

Thesis Supervisor:

Dr. Rabia Amir

Associate Professor

Thesis Supervisor's Signature: 

DEPARTMENT OF PLANT BIOTECHNOLOGY

ATTA-UR-RAHMAN SCHOOL OF APPLIED BIOSCIENCES

NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY

ISLAMABAD, PAKISTAN.

AUGUST 2022

iii

THESIS ACCEPTANCE CERTIFICATE

Certified that final copy of MS thesis written by Ms. Midhat Mahboob (Registration No. 00000329027), of Atta-ur-Rahman School of Applied Biosciences, NUST (School/College/Institute) has been vetted by undersigned, found complete on all respects as per NUST Statutes/Regulations, is free of plagiarism, errors, and mistakes and is accepted as partial fulfillment for award of MS degree. It is further certified that necessary amendments as pointed out by GEC Members of the scholar have also been incorporated in the said thesis.

Signature: Dr. Rabia Amir Associate Professor Atta-ur-Rahman School of Applied Biosciences (ASAB) NUST Islamabad

Name of Supervisor: Dr. Rabia Amir

Date: 26-08-22

Signature (HOD): Dr. Muhammad Faraz Bhatti Head of Department (HoD) Deptt of Plant Biotechnology Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST Islamabad

Date: 26-08-22

Signature (Dean/Principal): Dr. Hussnain A. Janjua Principal Atta-ur-Rahman School of Applied Biosciences (ASAB) NUST, Islamabad

Date: 26-08-22

iv

FORM TH-4

National University of Sciences & Technology

MS THESIS WORK

We hereby recommend that the dissertation prepared under our supervision by: (Student Name & Regn No.) **Midhat Mahboob Reg No. 00000329027**

Titled: Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea* be accepted in partial fulfillment of the requirements for the award of **Master of Science in Plant Biotechnology** degree with (A grade).

Examination Committee Members

1. Name: **Dr. Alvina Gul** Signature:

2. Name: **Dr. Faiza Munir** Signature:

3. Name: **Dr. Rabia Naz** Signature:

Supervisor's name: **Dr. Rabia Amir** Signature:

Dr. Rabia Amir
Associate Professor
Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST Islamabad

Date: 26-08-22

Dr. Muhammad Faraz Bhatti
Head of Department (HoD)
Deptt of Plant Biotechnology
Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST Islamabad

Dr. Faraz Bhatti 26-08-22
Head of Department Date

Date

COUNTERSINGED

Date: 26-08-22

Dr. Hussnain A. Janjua
Principal
Atta-ur-Rahman School of Applied Biosciences (ASAB)
NUST, Islamabad

Dean/Principal

Declaration

I certify that this research work titled "*Cadmium Trafficking and Chemical Communication in the Rhizosphere of Brassica Juncea*" is my own work. The work has not been presented elsewhere for assessment. The material that has been used from other sources it has been properly acknowledged / referred.

Midhat Mahboob

Master of Science in Plant Biotechnology

Registration # 00000329027

Copyright Statement

- Copyright in text of this thesis rests with the student Midhat Mahboob Copies (by any process) both in full or of extracts, may be made only in accordance with instructions given by the Midhat Mahboob (author); and lodged in the Library of Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST. Details may be obtained by the Librarian. This page must form part of any such copies made. Further copies (by any process) may not be made without the permission (in writing) of the author.
- The ownership of any intellectual property rights which may be described in this thesis is vested in Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST, subject to any prior agreement to the contrary, and may not be made available for use by third parties without the written permission of the ASAB, which will prescribe the terms and conditions of any such agreement.
- Further information on the conditions under which disclosures and exploitation may take place is available from the Library of Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST, Islamabad.

CERTIFICATE FOR PLAGIARISM

It is to confirm that MS thesis entitled titled "Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*" of **Midhat Mahboob** Reg No. 00000329027 has been examined by me.

I undertake that:

1. Thesis has significant new work/knowledge as compares to already elsewhere. No sentence, table, equation, diagram, paragraph, or section has copied verbatim from previous work except when placed under quotation marks and duly referenced.

2. The work presented is original and own work of author i.e., there is no plagiarism. No idea, results or work of others have been presented as author's own work.

3. There is no fabrication of data or results such that the research is not accurately represented in the records. The thesis has been checked using Turnitin, a copy of the originally report attached and focused within the limits as per HEC plagiarism policy and instruction based on time to time.

Dr. Rabia Amir
Associate Professor
Atta-ur-Rahman School of Applied Biosciences (ASAB), NUST, Islamabad

(Supervisor)

Dr. Rabia Amir

Plant Biotechnology

ASAB, NUST

viii

Acknowledgment

In the name of almighty **ALLAH,** the most beneficent and the most merciful, I am thankful to Him for all the blessings that are bestowed on me, for guiding me in the right path and for giving me the power to learn about his hidden wonders in nature. I praise **Holy Prophet (S.A.W);** his teachings encourage me to do my work with honesty and hard work.

I am very thankful to my **parents** that are my constant support system throughout my life. My **father** is that constant guide for me from whom I can discuss all my difficulties, problems and confusions and he is the only man who can solve all those. My mother is my true support system with which I can walk through the toughest paths of life.

I am very thankful to my supervisor **Dr. Rabia Amir,** Associate Professor, National University of Science and Technology and also **Dr. Tariq Shah**. I would not be able to complete my research work without their support, guidance, and devotion. They were always there to help me during my research work. I wish them a prosperous and successful life ahead.

I am also very thankful to my brothers **Muhammad Ali Mahboob** who supported me financially and **Muhammad Usman Mahboob** for motivating me. I am thankful to my sister **Maria Mahboob** for helping me whenever I needed her.

I would also like to thank **Maryam Khan** for guiding and helping me in my thesis. Apart from thesis she remained a constant guide throughout my research project. I wish Allah would grant her all the success and happiness for what she has done for me. I would also like to thank my research and project fellows **Qurat ul Ain Hira** and **Rimsha Azhar** for their helping hand during my research.

MIDHAT MAHBOOB

“My dissertation is dedicated to my parents, siblings and chaachu”

Abbreviations

%	Percent
°C	Degree Celsius
hr	hour
i.e.,	id est means “that is”
min	Minute
ml	Milliliter
et al.	et alia
FC	Field Capacity
PGPR	Plant Growth Promoting Rhizobia
HMs	Heavy Metals
RNA	Ribonucleic Acid
TIC	Total Ion Chromatogram
GC MS	Gas Chromatography Mass Spectrometry
Mg	Magnesium
S	Sulphur
Ca	Calcium
Cd	Cadmium
Ni	Nickle
Zn	Zinc
$CdCl_2$	Cadmium Chloride
$CdSO_2$	Cadmium Sulphate
N	Nitrogen
P	Phosphate
Fe	Iron
Co	Cobalt
Mo	Molybdenum
Mn	Manganese
mg	Milligram

Content

List of Figures

List of Tables

Abstract

Phytoremediation is an effective technique in countering heavy metal toxicity in soil. Roots and root exudates play a pivotal role in the process of phytoremediation. Heavy metal trafficking and chemical communication in the rhizosphere helps in overall adaptation and tolerance of hyperaccumulator plant. Metabolic profiling of exudates has been considered particularly important to understand the overall signaling of metabolites while countering an abiotic stress. *Brassica juncea* has been considered as a plant having phytoremediation capabilities. This is because it has high biomass and is a hyperaccumulator plant. In this study effect of cadmium in the roots of *Brassica juncea* is analyzed and cadmium trafficking in the rhizosphere is dissected by conducting metabolic profiling of root exudates. The results showed that metabolic profile of the root exudates was significantly altered in response to cadmium stress as many Phyto chelating compounds that is different amino acids, organic acids, phenols etc. were found on the treated groups. These compounds are expected to have major importance in the adaptation of *Brassica juncea* in response to cadmium stress. Minimal to no significance has been observed in root system architecture of *Brassica juncea* that is only root hair density and length are clearly significant all other parameters are non-significant or showed minimal significance.

Keywords: Phytoremediation, Root exudates, *Brassica juncea*, Metabolic profiling.

CHAPTER 1 : INTRODUCTION

1.1. Heavy Metal Toxicity

Heavy metals heavily effect and contaminate the environment of the soil. It is also affecting growth of the plants and causing hazardous consequences for our ecosystem. Heavy metals are also affecting the metabolism of the plants, also interfering protein activities and as a result causing oxygen stress. Plants encounters that excess number of heavy metals with the overly complex cascade of the biological activities. These activities may include antioxidant mechanisms, chelation, and regionalization of heavy metal ions (Feng et al., 2021).

1.2. Techniques to remediate heavy metals

There are many methods and techniques to tackle this on-going threat to the ecosystem. Passivation has been considered as a particularly useful technique for detoxifying cadmium polluted soil. But its drawback is that it can only reduce the Cd availability of the soil instead of removing cadmium altogether. There is another in-situ technique that can remove cadmium from the soil that is the employment of well-designed reusable device. The device consists of three very conventional soil amendments which includes cation exchange resin (CER), biochar (BC), and steel slag (SS). These amended soils were combined with conventional compound fertilizers and slow-release fertilizers. The results showed that the device with CER, BC, and SS reduced soil Cd by 12.6%, 16.2%, and 19.8%, respectively. But this can be very expensive either (Zhang et al., 2021). There are many other solutions as well such as optimum plant nutrition (Haider et al., 2021).

1.3. Phytoremediation

Phytoremediation has come up as the most applicable solution for cadmium contamination. Phytoremediation is basically the remediation through vegetation. This is an in-situ treatment for contaminated soil, water, and sediments. This is applicable on the sites that are polluted by organic, nutrient or metal pollutants. These contaminants are accessed by the roots of the plants and then they are sequestered (Dietz & Schnoor, 2001). Phytoremediation is the best possible technique to remediate heavy

metal contaminants due to its cost effectiveness, aesthetic aspects as well as long term applicability (Schnoor et al., 1995). In the process of phytoremediation rhizosphere play a very important role.

1.4. Rhizosphere

For many years it has been observed that the physical, chemical, and biological properties of the soil that is in interaction with the plant roots are vastly different than the rest of the bulk soil. There are also many processes that are occurring under the ground around the root and the soil interface. This is because plants require both nutrients and water for its growth and in consequence of this heavy requirement whether directly or indirectly these process takes place. It is also very necessary because there are many other organisms that also require a very favorable environment for their growth and production. In that regard the biological properties of the rhizosphere have gained much attention (Bowen & Rovira, 1991; Lynch, 1990). There is also a lot of literature on bacterial and fungal colonization on the root and the surface of the root.

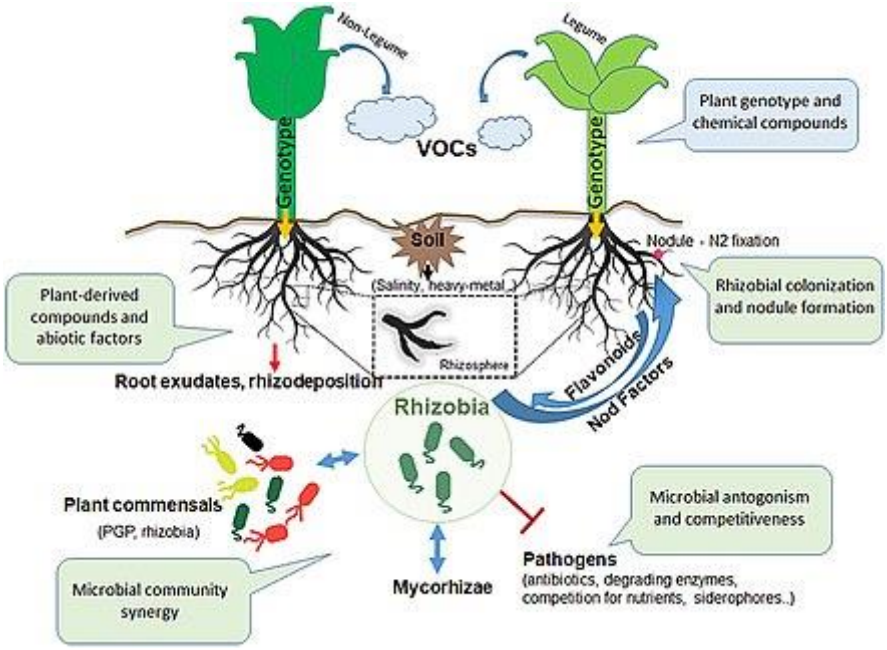


Fig 1.1: Inter and intra kingdom interactions and communication in the rhizosphere.

Information retrieved from (Checcucci & Marchetti, 2020)

In recent years when these studies gained potential it is observed that for the purpose of the capturing of resources the roots changes the environment by allowing the movement of water and the nutrients to the roots (Passioura, 1988). Darrah (Darrah, 1993) also studied the importance of the rhizosphere for the take up of nutrients by the plants and most importantly the physical, biological and chemical changes that are induced by roots in the rhizosphere of the soil. He also stated that it exceedingly difficult to quantify all these changes because there are many processes that are occurring side by side or in parallel. For example, the uptake of phosphorus in the plants may include a combination of many things for example root architecture and length, mycorrhiza and root hairs, changes in the soil pH, enzymes produced by the roots or bacteria and the enzymes that leads to the phosphorus mineralization moreover also the physical properties of the root membranes.

From the ecological and agronomic point of view also these processes are particularly important. So, quantifying their contribution to the total uptake to understand the phenomenon of competition and the complementarity. And then by selecting those features that are necessary to fit any crop to their particular environment. Different new experimental techniques and instruments have aided and helped in understanding the interfacial zone and allowing the measurements independent of the soil that is present in bulk. The colonization of the root surface can be studied by using scanning and transmission electron microscope (Foster, 1986).

The investigation of the microbial habitat has been made easy with the recent development of lux genes (Paton et al., 1997). Moreover, computed tomography and magnetic resonance imaging have allowed the examination of the physical properties surrounding roots (Asseng et al., 2000). Many advances in the chemistry of the rhizosphere have made the study of nutrient availability and plant acquisition of the nutrients very feasible (Hinsinger, 1998).

The chemical properties of the rhizosphere, the changes of the rhizosphere that are induced by the roots and the chemical properties that might have an impact on the mineral nutrition of the plants have been described in many different species (Hinsinger, 1998; Marschner et al., 1986). The main significant changes are.

1) Changes in the ionic concentrations that is depletion or accumulation in the rhizosphere. This due to the direct consequence of the uptake of water and nutrients at different rates. These changes can be easily studied by various different techniques such as autoradiography (Lewis & Quirk, 1967) or may some rhizoboxes (Kuchenbuch & Jungk, 1982).
2) deficiency in nitrogen, iron and phosphorus leads to the changes in the ph. The pH change is the most significant documented chemical change that occurs in the rhizosphere. This is because the range of different techniques that have been developed.
3) For the enhancement of nutrient mobilization there is the exudation of low molecular weight exudates. These exudates can be organic acids such as citrates that are released by roots and some proteoid roots for the solubilization of ions such as iron or phosphates, (Ae et al., 1990; Jones et al., 1996; Jones & Darrah, 1994). Also some amino acids such as Phyto siderophores that are released by the grass roots for solubilization of irons and some other metals (Römheld, 1991).
4) there is excretion of different enzymes to release mineral nutrients such as catalytic hydrolysis for organic phosphorus (Tarafdar & Jungk, 1987).
5) A particular change in redox potential, for example oxidation which is an increase in the redox potential which usually occurs in rhizosphere of the lowland rice. This phenomenon is basically the result of release of O_2 by the roots of the rice (Flessa & Fischer, 1992) followed by the oxidation of ferrous iron (Begg et al., 1994).

There are many studies which suggests that the there is some link between the N nutrition and the changes in the pH which be up to 2 pH units in the rhizosphere. Moreover, when the plants are absorbing more cations than anions or more anions than cations then hydrogen or bicarbonate ions are formed. This is basically to maintain electrical neutrality across the root and soil interface. This is because in many plant species this kind of balance is dominated because of nitrogen entering the roots and then either nitrate or ammonium uptake takes place which results in the changes in the pH of the rhizosphere.

In case of nitrates HCO-3 is exported in the consequence the pH rises. When the uptake of ammonia takes place H+ is exported as result of which the pH falls. In another case there is a net excess of cations is taken up when N is taken up from urea or in the form of uncharged molecular nitrogen (N2 fixation), so even if a very small amount of H+ is exported than with the nutrition of ammonium, there is a fall in the rhizopheric pH takes place(Wollenweber, 1997).

1.5. Root Phenotype

The root system architecture can be referred to as the spatial arrangement of the overall root system inside the soil (Lynch, 2007) . There are different parameters or components of a root system that basically define a particular root system architecture of a root system. These components includes primary root branch, root density, lateral root branch, root length, root diameter, root angle etc. (Kuijken et al., 2015). Considering the needs of the plants and soil microenvironment the root architectural properties act and respond accordingly and are modified. Hence under the influence of the abiotic stress root system architecture plays an important role in the adaptation of the plant according to the conditions. According to Lynch (Lynch, 2007) , there should be more emphasis on the changes in the system of root in order to increase the adaptation of the crop or plant under several different stress conditions for the purpose of the enhancement in the crop production. Modification in the traits of root system architecture of a crop in the conditions of drought and nutrient deficient environment can vastly help in the increase in the yield (Wasson et al., 2012)

1.6. Cadmium: A Toxic Heavy Metal

Cadmium is a heavy metal. It is considered as trace elements by the geochemists. In the upper continental crusts, its concentration is almost around 0.1mg. This concentration is very much below the limit between trace and the major elements. Cadmium is a transition metal. Cadmium has no considerable function in the biological organism apart from marine diatom Thalassiosira weissflogiii. In this it has the function of replacing zinc as cofactor of carbonic anhydrase (Lane et al., 2005).

In fact, cadmium is a very toxic heavy metal and is injurious to most of the living organism. It implements its toxic effects by two ways. One is by competing with the other essential metals and elements as well as calcium. The other way is by inducing

oxidative stress through perturbation of the glutathione redox balance. If accidently gets in the biological organism it remains there for exceptionally long. For example, its half-life for human body is 30 years. If it gets in the kidneys and bones it can cause serious illness such as osteoporosis, heart diseases, cancer and kidney failure (Chain, 2012). This is because even a very minute amount or low level of cadmium exposure is serious threats to human health.

Cadmium mostly gets into human body by smoking but apart from that the main sources of it are also cereals, tubers, roots and vegetables (Chain, 2012). These are plant-based products. Cadmium comes in them through the soil. And by the process of root absorption and translocation it goes to the harvested organs of the plants too. Human behaviors and activities are the reasons behind this soil contamination with cadmium. The main sources are atmospheric deposition of industrial and urban discharges, phosphate related fertilizers and organic and mineral amendments. In the Europe the major source of cadmium deposition in the cultivated soil is through phosphate fertilizers (Six & Smolders, 2014; Sterckeman et al., 2018).

In the soil the dominant form of the metal is Cd2p. it has some physiochemical properties which leads to its accumulation in the soil. It is accumulated by binding to the solid components of the soil. This binding is basically reversible in nature (Smolders et al., 1999).

US agency for Toxic Substances and Disease Registry (ATSDR, 2008) suggested a limit of 0.7 mg Cd per kg of body weight (bw1) per week (w1). But most of the population is over exposed of this toxic metal of which the main major source is the low level chronic exposure in the form of food consumption (Clemens et al., 2013).

Chemistry of cadmium in the soil and its accumulation by plants is the topic of research and study since 1970s (e.g. (Haghiri, 1973; John et al., 1972; Lagerwerff, 1971) . The main focus of these type of the research till now is to know the supply, distribution, and toxicity of Cd into the roots and its level of tolerance in the organs of the plants. The distribution of Cd in the plants greatly varies from specie to specie as well as within the species. This highly depends on the population as well as the cultivar (Florijn & Van Beusichem, 1993; Gonneau et al., 2014; Greger & Löfstedt, 2004; Laporte et al., 2015). These distributions points towards the importance of genetic factors.

1.6.1. Cadmium Trafficking

During the last 20 years numerous research has been conducted to know the mechanism of biomolecular accumulation of cadmium by the plants. Many efforts were being made for the identification of genes and proteins that are involved in the uptake of cadmium, transport, storage, and the phenomenon of detoxification n the plant tissues. The outcome of these studies is the creation of some cultivars that take up very less cadmium in the harvesting parts (Clemens et al., 2013).

Another outcome that is decontaminating soil by the help of some phytoextraction. This is basically cultivating those particular plants that can take up high amount of cadmium in their aerial parts. As it takes up the cadmium in their aerial part automatically the cadmium content in the soil decreases. But this phenomenon of phytoextraction is associated with those plants that are low in terms of cadmium accumulation and high in terms of the biomass.

These phytoextracting plants may include sunflower (Helianthus annuus), maize (Zea mays), poplar, or willow. An alternative to this is the use of those plants that are hyperaccumulators and hyper tolerant to the metals for example, Cd, Ni or Zn (Chaney et al., 2014) (Sterckeman et al., 2018). These include Arabidopsis halleri, Noccaea caerulescens (Brassicaceae), or Sedum alfredii (Crassulaceae). Cadmium remains in the soil in the form of the divalent cation Cd2p. when the Cd2p is absorbed in the root cells there is a reduction in the ion concentration in the root cells. As a result of this a concentration gradient is generated which further drives the diffusion of Cd2p in the direction of the roots.

Another way of the transportation of cadmium is through the process of advection. In this phenomenon the roots move with the same speed as the water through the process of transpiration the plants. But when it comes to the Cd the phenomenon of advection is almost negligible as compared to the diffusion. One more important fact is that the Cd2p desorbed from the solid phase replenishes the soil solution whenever the root depletes it. Pecto-cellulosic walls of the root cells absorb some of the cadmium ions. Some other diffuses in the apoplasts before reaching the very first apoplastic barrier. This apoplastic barrier is basically a portion in the extracellular matrix which resists the process of diffusion of ions between the cells.

This is due to the deposition of impermeable polymers that are lignin and suberin. Exodermis is basically the first apoplastic barrier its location in the plant organ is just below the epidermis. The apoplastic barrier can be endodermis and its location are somewhere where the roots vaculature is located. These information on the apoplastic barriers are dependent on the species of the plants and the location along the roots. Using transport proteins, from domains of apoplasts these ions cross the cell membranes. By keeping the membrane potential of 120mV the Cd2p gets accumulates passively by the four orders of the magnitude.

This is the reason for the absorption of Cd2p into the root cells do not require active transport when the cadmium ion gets into the cytosol it builds up a complex with the organic ligand. By that the concentration of the Cd2p in the cytosol gets reduced which results in the automatic reduction in the metal toxicity. Now some amount of cadmium in the cytosol moves into the xylem parenchyma by the movement through plasmodesmata to pass from one cell to another. Then after that by the process of active transport the metal gets into the xylem vessels, and this is actually against the electrochemical gradient. Some other compounds of the cadmium that are residing in the cytosol are transported into intracellular organelles such as mitochondria, Golgi apparatus and the vacuole.

These transportations in the intracellular organelles are made through the transport proteins. When cd reaches the vacuole lumen it is mostly chelated with the organic ligand. That is why when it is considered that when the Cd2p is taken up by the root symplast, its translocation in the upper parts of the plants is done by these following three main processes.

- Sequestration In root cells
- Transport in symplast to stele
- Xylem loading

There is a lot of competition in above three processes and that is the reason in higher plants Cd is accumulated more in the roots than in the shoots. But nevertheless, there are some species that are hyper accumulating in nature, and they accumulate higher concentration of metal in the aerial parts of the plants than that of the roots. As it gets into the sap of the xylem, Cd2p starts forming complexes with the ligand. Now these

complexes, with free ions in them, starts transporting into the upper parts of the plants. This flow of the xylem sap is generated by the process of the transpiration.

When all this phenomenon of transport is happening the ions also starts its interaction with the cell walls of the xylem vessels and apart of them also gets itself absorb into it. Through the xylem cell wall following the flow of transpiration it also gets it to the stem and leave cells. There are some free ions and the complexes that that are stored in the form of the chelates when they enter in an organelle or particularly in the vacuole. In shoots the distribution differs with the location and the specie of the plant. In shoots Cd2p is distributed in different amounts in different cell compartments such as cell wall, cytosol, and vacuole. In tissues it is distributed in vascular tissues, parenchyma, and epidermis. Some studies also revealed that cadmium in the leaves is redistributed into the other parts of the plants through the activity of phloem. This flow through the phloem also let the toxic cadmium to invade or transport to the reproductive organs of the plant such as seed.

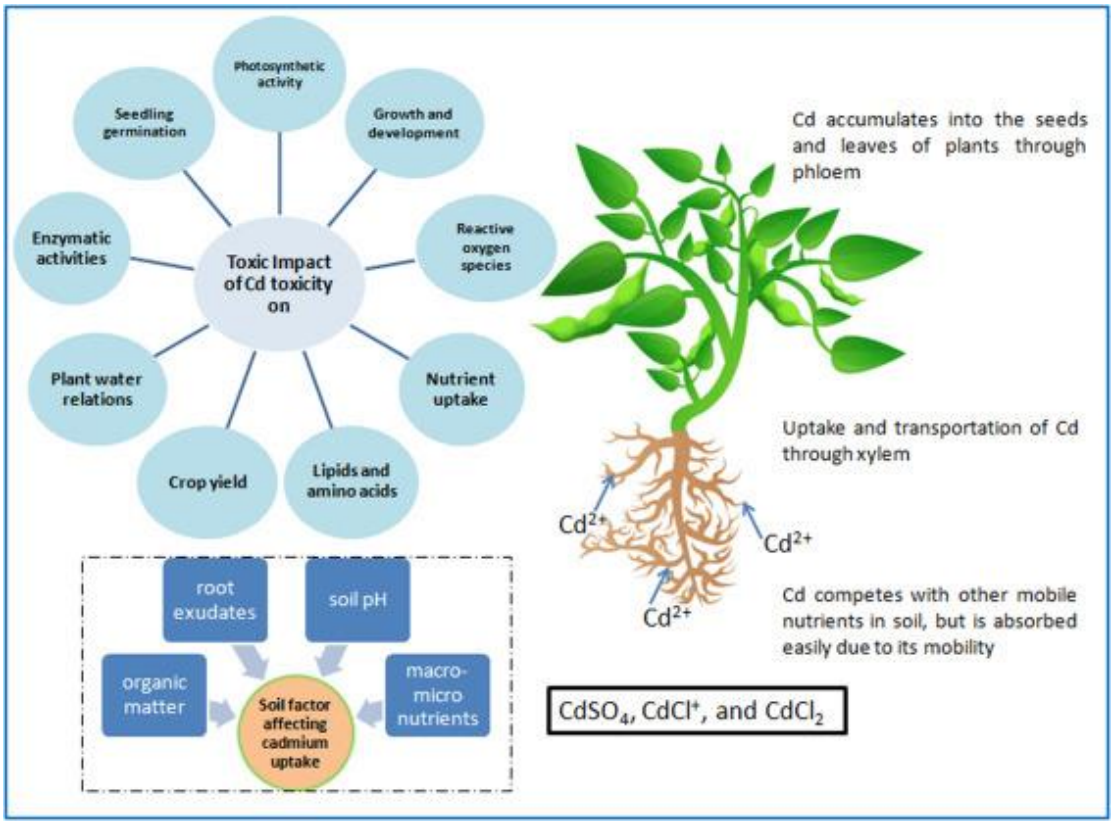


Fig 1.2: Transportation, accumulation, absorption, and toxicity of cadmium in plants. Root exudates, soil pH, organic matter, micro and macro nutrients have key important role in the uptake of cadmium in plants.

Information retrieved from (Haider et al., 2021)

1.7. *Brassica juncea* and its role as a hyperaccumulator in rhizosphere

Brassica juncea is an important specie of the mustard family of Brassicaceae also known as Cruciferae family. In different parts of the world, it is also known as Indian mustard, Chinese mustard, oriented mustard, leaf mustard, or mustard green. Its main origin is central Asia (northwest India), but it is vastly found in other parts of the world too for example, central and western China, eastern India, Burma, and from Iran to the Near East. Its primary growing countries are Nepal, China, Bangladesh, India, Japan, Central Africa, Pakistan also southern Russia north of the Caspian Sea. It is also known as a main weed in Canada, quite common in Australia and Argentine and considered as weed in United States, Mexico, and Fiji.

In the climates like subtropical and temperate *Brassica juncea* is considered as a cultivar and transgenic escape. It can also be used in different forms like in Japan, China, America and other countries and some other regions its seed is also consumed as a spice, and edible oil and protein and as an alternative medicine. Its leaves also have a vast use it is used as folk medicine as stimulants, diuretics and expectorants (Farrell, 1999).

It is also used as a major ingredient of their traditional food kimchi. Kimchi is basically their fermented vegetable food. And now kimchi containing mustard seed has considered as useful in terms of health maintenance and disease prevention (Young Kim et al., 2003). The mustard oil extracted from its seeds has also its use in cosmetics for hair control (YU et al., 2003). Ally is isothiocyanate is basically the major chemical constituent, it is formed during the processing of the seeds (YU et al., 2003). This isothiocyanate is also very useful and considered to be cancer chemo-preventive phytochemical and antimicrobial agent in fighting against various organisms.

This isothiocyanate is not only found in *Brassica juncea* (Hill et al., 1987) leaves but are also present in other edible cruciferous vegetable (Higdon et al., 2007). But among

those vegetables, the glucosinolates which is the precursor of isothiocyanate has its highest content in the *Brassica juncea* (McNaughton & Marks, 2003).

Brassica juncea also produces many other bioactive Phyto-chemicals that includes flavonoids, phenolic compounds, glycosides, sterols, triterpene alcohols, proteins and carbohydrates (Appelqvist et al., 1973; Das et al., 2009; Fabre et al., 1997; Jung et al., 2009; Li et al., 2000; Sang et al., 1984; Yokozawa et al., 2002). *Brassica juncea* is also very cost effective and is in use for centuries nutritive product and medicine (Manohar P et al., 2009). In these recent years it is also cultured for some greater benefits like selenium, chromium, iron, and zinc food supplements.

Brassica juncea has the ability for phytoremediation. This ability can directly be involved as a crop or there is a chance that there are some genes that are involved in the process of phytoremediation (Prasad, 2001). Indian mustard has the capacity for the storage of high concentrations of heavy metals in its parts (Prasad, 2001) (Šimonová et al., 2007). There are many other species of different families that have been involved in adapting intense soil heavy metal environment (Prasad, 2001). These families includes Brassicaceae, Caryophyllaceae, and Fabaceae (Hassan & Aarts, 2011). Among these families Brassicaceae is considered best for metal accumulation and in it *Brassica juncea* is considered highly effective specifically in cadmium metal tolerance along with lead and mercury (Verbruggen et al., 2009).

1.8. Metabolomics

Metabolomics is a very latest technique for the analysis of low molecular weight metabolites both quantitative and qualitative. The transport of heavy metal ions inside the plants is simply that different types of plants have different enriched sites. Such as there are some plants that have high concentration of heavy metals inside their roots as compared to other parts like leaves and stems but on the other hand there are some plants that transport the heavy metals absorbed by the roots to the parts of the plants this is to reduce the local level of the heavy metals. There are some plants that are hyper accumulator, and they have the ability to absorb large amounts of the heavy metals from the soil. These plants may help in the phytoremediation of the heavily contaminated soil. Metabolomics may help in identifying the hyper accumulator. There are also many studies that have their main focus on the cadmium stress. (Feng et al., 2021).

Plant metabolomics help in understanding the basic metabolic mechanisms of plants when they respond to stresses (Cao et al., 2017; Zeng et al., 2020). *Brassica juncea* has been considered as a potential model plant to explore the metabolic changes and metabolic networks of secondary metabolites. Furthermore in understanding the expected mechanism behind the tolerance or hyperaccumulation of cadmium in the cadmium rich plant (Kumar et al., 2017). Luo et al. (Qing et al., 2015) studied the metabolic spectrum changes of exudates in Sedum alfredii root under Cd stress by using the metabolomic method based on gas chromatography-mass spectrometry (GC-MS). Metabolites associated with aspects of the detoxification of heavy metal have been reported including organic acids, amino acids, peptides, glutathione, and phytochelatins (Shanmugaraj et al., 2013). However, the underlying metabolic mechanisms are unclear.

1.9. Objectives of the Study:

Cadmium is taken up by the plant roots from the soil solution that surrounds it. Many chemical reactions take place in the soil solution. The chemistry and chemical reactions of cadmium that take place in the rhizosphere can be useful in understanding that these reactions basically control the concentration of metal in the solution (Sposito, 2008). *Brassica juncea* has a good potential in terms of phytoremediation of a cadmium affecting soil. This is because it is hyper accumulator of cadmium and it has high biomass (Tan et al., 2021). Objectives of the study titled "Cadmium Trafficking and Chemical Communication in the Rhizosphere of *Brassica Juncea*" are as follow:

To study chemical communication within rhizosphere under heavy metal stress

- Root structure analysis would be performed in plant grown under heavy stress.
- Metabolic profiling of root exudate would be performed to identify chemicals involve in the communication within rhizosphere.

CHAPTER 2 : LITERATURE REVIEW

2.1. Heavy metal toxicity and Cadmium

Contamination of the soil by heavy metal stress has become a worldwide problem as it is disturbing the environment as well as the food chain. Increase in the cadmium level of the soil have its effects on the metabolism of the plants. The experiment is to investigate the effects of different levels of the concentrations of the cadmium that is 0, 25, 50, or 100 mg kg-1 soil on the overall performance of Lepidium sativum. Increase in the cadmium concentration of the soil leads to the increase of the cadmium accumulation in the roots and the leaves. High level of the cadmium concentration also resulted in the notable reduction in the net photosynthetic rate, intracellular carbon dioxide, chlorophyll contents, carbonic anhydrase, and nitrogen content as well. But it was observed that there is an increase in the levels of the ATP-sulfurylase activity, contents of the sulfur, antioxidant enzymes such as superoxide dismutase, catalase, ascorbate peroxidase and glutathione reductase and glutathione. On one end, high cadmium concentrations disturb the growth of the *L. sativum* by disturbing the photosynthetic machinery and also by interfering with the coordination of the Sulphur and the nitrogen metabolism. And on the other end the low concentration of the cadmium the Sulphur and the nitrogen metabolism accompanied the oxidant machinery for the growth and the photosynthesis of the *L. sativum*. (Gill et al., 2012)

Cadmium, Arsenic, Aluminum, Mercury, and Lead are toxic and carcinogenic heavy metals that are affecting soil, air and also water. HMs affect plant growth and crop yield. Plants have developed complicated defense mechanisms for defending themselves against the noxious effects imposed by HMs, including compartmentalization and confiscation in cell-organelles, inactivation by complex formation with the organic ligands and their omission using transporters, ion channels, transcription factors and signaling molecules, beside others. Omics approaches have generated important resources and updates on the plant genome, transcriptome, and metabolome plasticity against HM-induced stress stimuli. Omics technologies are hardheaded and seen as practicable approaches for distinguishing the roles of genomes that is genomics, coding that is transcriptomics and non-coding that is miRNA omics

RNA transcripts, and metabolites that is metabolomics including metals that is metallomics, which can ultimately be used for improving stress tolerance or generating resilience plant systems. (Jamla et al., 2021)

Cadmium is a toxic, metal and has hazardous effects on the plants. The remediation of the toxic metals through the phytoremediation is a cost effective, environment friendly and secure method. Cadmium accumulated in the Phyto remediating plant transport that cadmium into roots, shoots, leaves and also vacuoles. The proficiency of the cadmium phytoremediation and Cd bioavailability can be enhanced with the help of plant growth promoting bacteria (PGPR). Latest molecular technologies have also revealed the metabolic processes that are associated with the cadmium tolerance in the hyper accumulator plants and the cultivated crops. For an efficacious rehabilitation, it is very necessary to consume most important physiological characteristics of cadmium hyper accumulators for the extraction, transformation, and stabilization of cadmium. It is also very important to evaluate the efficacy of the phytoremediation technologies and assimilate the available resources. This will help in the Phyto extraction process as well as boost the productivity of the plant in the areas that have suboptimal soil metal levels by the utilization of the multi-omics approaches, microbe potential, amendments such as AMF and PGPBs and also the genetic engineering techniques. (Raza et al., 2020)

Cadmium, Arsenic, Aluminum, Mercury, and Lead are toxic and carcinogenic heavy metals that are affecting soil, air and also water. HMs affect plant growth and crop yield. Plants have developed complicated defense mechanisms for defending themselves against the noxious effects imposed by HMs, including compartmentalization and confiscation in cell-organelles, inactivation by complex formation with the organic ligands and their omission using transporters, ion channels, transcription factors and signaling molecules, beside others. Omics approaches have generated important resources and updates on the plant genome, transcriptome, and metabolome plasticity against HM-induced stress stimuli. Omics technologies are hardheaded and seen as practicable approaches for distinguishing the roles of genomes that is genomics, coding that is transcriptomics and non-coding that is miRNA omics RNA transcripts, and metabolites that is metabolomics including metals that is

metabolomics, which can ultimately be used for improving stress tolerance or generating resilience plant systems. (Jamla et al., 2021)

2.2. Phytoremediation

Phytoremediation can help a lot in countering the toxic effects Pb in the soil. In this regard root exudates can play a very important role. Pb accumulating and non-accumulating ecotypes were taken and treated with 0 and 50µmol/L Pb. Metabolic profiling analysis of root exudates of both the treatments was evaluated through Gas chromatography and mass spectrometry methods of metabolomics. The results showed that the stress of Pb could change the concentrations and compounds of the roots exudates. There were fifteen compounds that were identified, and it was assumed that these were the biomarkers. It was observed through leaching experiment that I-alanine, I-proline and oxalic acid have a significantly good impact to activate the Pb in the soil, glyceric acid and 2-hydroxyacetic acid have a more general effect for the activation of Pb, there are chances that 4-Methylphenol and 2-methoxyphenol may have the effect of the activation of the Pb in the soil and glycerol and diethylene glycol may have the effect to stabilize Pb in the soil. But these activations and stabilizations are not much clear or obvious. (Luo et al., 2017)

2.3. *Brassica juncea* as a phytoremediator

Brassica juncea that is Mustard and *Helianthus annuus L* that is Sunflower are the plants that has high biomass and rapid growth rate and that is why it is a very important specie in terms of Phyto extraction. (Shakoor et al., 2017)

Brassica juncea has a good potential in terms of phytoremediation of a cadmium affecting soil. This is because it is hyper accumulator of cadmium, and it has high biomass. The experiment is to observe the cadmium effect under the duration of 7day stress and 48 h stress in the roots of *Brassica juncea*. Upon metabolic profiling there are many metabolic pathways and metabolites that have shown a significant change in response to the effect of the cadmium stress. It was observed that there is an observable difference in different intervals of time by different compounds such as amino acids, organic acid, carbohydrates, flavonoids, alkaloids, lipids, and indoles in the response of cadmium stress. It was also observed that the roots of *Brassica juncea* have the ability

to prevent the stress of cadmium during 48h by the regulation of biosynthesis of amino acid, linoleic acid metabolism, aminoacyl-tRNA biosynthesis, glycerophospholipid metabolism, ABC transporters, arginine transporters, valine, leucine, isoleucine biosynthesis and alpha-linolenic acid metabolism. On the other hand, the 7-day stress is prevented by the regulation of alpha-linolenic acid metabolism, glycerophospholipid metabolism, ABC transporters and linolenic acid metabolism. The metabolic profiling of *Brassica juncea* in response to cadmium stress will help in understanding the accumulation and tolerance mechanism in response to cadmium stress in *Brassica juncea*. (Tan et al., 2021)

2.4. Hyperaccumulation

Mechanisms that are activated in the plants to absorb and then detoxify the toxic heavy metal ions. These mechanisms include the synthesis of the phytochelatins, metallothioneins and some enzymes that are involved in the stress responses. There is a process known as the hyper accumulation. This process is dependent on the mechanism of internal hyper tolerance. This is for the resistance of the cytotoxic levels of the metals that are accumulated. Till now there are approximately four hundred plants that are metal hyper accumulator. Most of those plants are hyper accumulators for Ni and Zn. But there are few species that are hyper accumulator for cadmium. *Brassica juncea* also known as Indian mustard is considered as an appropriate specie. This is because of its three main qualities that is its biomass production is very large, metal accumulation is relatively very high and it already has a very well established transformation technology. (DalCorso et al., 2008)

2.5. Metabolomics

Different domains of biological sciences such as metabolomics, transcriptomics, and proteomics etc., have helped in the characterization of metabolites, transcription factors, and the stress inducible proteins that are involved in the tolerance of heavy metal stress. Metabolomics is basically the identification and the quantification of all of the metabolites that are in low molecular weight and during the stages of the development they are required. And there are also some metabolites that are required and are involved in the tolerance strategies during some heavy metal stress these

metabolites includes Amines and Amino acids, organic acids, Glutathione and α-Tocopherol, phenols and Ionome. Ionome basically includes the role in alleviating heavy metal toxicity of mineral nutrients, namely nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), sulfur (S) and magnesium (Mg) and trace metals namely iron (Fe), copper (Cu), manganese (Mn), molybdenum (Mo), cobalt (Co), and zinc (Zn). (Singh et al., 2016)

An experiment has been done with the spinach plant under cadmium stress. the cadmium concentrations were Cd=30, Cd=60, Cd3=90mg/kg soil. The spinach plant was sampled at 25, 40, 55 and 75 days after sowing. It was observed that there is an increase in Glu and Asp content. This increase was associated with the increase of the cadmium content during the 55 days of the plant growth. After 55 days of the evaluation the Cd3 treatment shows highest accumulation of AAs. With the increase in the cadmium concentration the contents of saturated fatty acid were increased, and the contents of the unsaturated fatty acids was decreased in the above ground biomass of spinach. When the multivariate analysis was performed the results showed that the cadmium contamination significantly effects the fatty acids metabolism. (Zemanová et al., 2015)

CHAPTER 3 : MATERIALS AND METHODS

3.1. Soil preparation

Soil was collected from Oil and Seed Department of National Agricultural Research Centre (NARC), Islamabad, Pakistan. It was sieved and were transferred into the rhizoboxes after the labelling of rhizoboxes.

3.2. Seed Collection and Germination

Qualified and healthy seeds of one variety of *Brassica juncea* (BARD-1) were collected from Oil and Seed Department of National Agricultural Research Centre (NARC), Islamabad, Pakistan. A variety of Mong bean (NM 11) was also collected from Oil and Seed Department for the purpose of co-planting. Seeds were first transferred to a petri plate. After that water was poured in the plate so that the seeds got wet. After that rectangular transparent lunch boxes were taken and perfectly cut of its exact sized filter paper was fitted to the lunch boxes and Hoagland solution was poured into the lunch box so that the filter paper got wet. After that seed was placed into the lunch box line wise with a fair distance. At most 5 to 6 seeds were placed in the horizontal direction. Forceps were used to transfer seeds. The lunch boxes were closed properly and were placed in a growth chamber. 22- 28°C temperature was maintained.

3.3. Contamination of the soil

10mM solution of cadmium chloride was prepared. 4.1 ml cadmium chloride solution was transferred to the rhizoboxes of the treated groups. Poured water to full holding capacity. Water was given so that cadmium got perfectly binded to the soil. Rhizobia (*Rhizobium leguminosarum*) and activated Bio char were also added into the soil and water was given.

3.4. Field Capacity Measurement

Field capacity is the measure of upper limit of available water or moisture content contained in pores after water drainage by gravitational force (de Oliveira et al., 2015). The FC of potting media was evaluated through two methods as mentioned. According to one method, 100g of potting media which was a mixture of soil and coconut fibers

in 1:1 ratio was put in Whatman filter paper no. 1 placed in funnel tube with a stand. 100 mL water was added slowly into the funnel containing potting media. Whole media got overflowed with water which started tripping through stem of funnel tube. Excessive water flowing though funnel was collected carefully into graduated cylinder until it stopped tripping. The difference between 100mL and volume of collected water in the graduated cylinder measured in mL gave FC which was ≈28 mL/100g. Moreover, the media at this stage is known as saturated media which was used to calculate FC by other method.

3.5. Plantation

After all the treatments given healthy and equally sized seedlings were planted and co-planted into the pots. Plantation was done on 24th September 2021. 16- 18 hr light and 23°C temperature was set in the glass house and was maintained till 28 days. In those 28 days water was given properly on daily basis. Randomization was done Two times a day.

3.6. Treatments

Codes	Treatments
T1	Sole Brassica+ no stress
T2	Sole Mung Bean+ No Stress
T3	Stress+ No Plant
T4	Sole Brassica+ Stress
T5	Sole Mung Bean+ Stress
T6	Brassica+ Stress+ Strain
T7	Brassica + Stress+ Bio Char
T8	Brassica+ Stress+ Bio Char+ Strain
T9	Stress+ Brassica+ Co- Plantation with Mung Bean
T10	Stress+ Strain+ Co- Plantation with Mung Bean
T11	Stress+ Strain+ Bio Char+ Co-Plantation with Mung Bean

Table 3.1: Key for Treatment Groups

3.7. Harvesting and uprooting

Harvesting was done on 20th October 2021. Rhizoboxes were opened. Water was spilled upon the soil as long as only a muddy root network was left behind. Roots were not damaged while the process of uprooting.

3.8. Sample Collection and Preservation for GCMS analysis

3.8.1. Exudate Preparation

The muddy separated root network was transferred to deionized water in the test tube and was placed in ice. Kept in shaker for 1hr so that all the exudates got dissolved in the deionized water. Later after shaking roots were taken off from the test tube. The test tube was filled the Methanol about third forth and place it in the ice. Meanwhile the roots which was taken out was freshly weighed. The upper parts of the roots that is shoots were also weighed after separating it from the roots.

Test tubes containing exudates were centrifuged for 30 minutes. After which separated layers appeared. Clean solution was picked with the help of syringe and filtered out on another test tube. After which the test tube rack was placed in the -20°C for preservation purpose(Luo et al., 2017).

3.8.2. Sample Reduction

Before going for GC MS, the samples must reduce. Sample can be reduced by two methods. First is that one can use Rotary Evaporator for this purpose keeping the temperature not above than 40-45°C. Another method is Air drying it under Laminar Air flow Hood by turning the blower On.

3.8.3. Re-suspension

Reduced sample is re suspended in the Methanol and each sample is transferred into 3 Eppendorf for the purpose of back up replicates. Preserve the Eppendorf in -20°C. Upon this samples were all ready for the GCMS processing.

3.9. Sample Collection for Phenotypic Analysis

Root scanning method is a very efficient method for analyzing roots. In this method it is necessary to analyze roots right after harvesting. At first the samples are washed

properly then for the purpose of spreading roots properly they are kept in a tray and then submerged in water. By that the overlapping of the roots will be diminished to its minimum level and the separation reaches its maximum. After that, the roots are placed in an X-ray sheet and are scanned in a general scanner. After that, the scanned roots are analyzed using a GiaRoot software. By using this software different parameters are analyzed for example average root width, specific root length, number of connected component, network width, network width to depth ratio, network volume, network surface area, network solidity, network area, network perimeter etc. (Tripathi et al., 2021).

3.10. Root Hair Sample Collection for microscopy

Root samples were collected and preserved in 4% Formaldehyde. Preserved in 4°C and examined under microscope. The images were analyzed by using ImageJ and density is calculated (Bahmani et al., 2016).

3.11. Statistical Analysis

Data was arranged, organized, and compared using Microsoft® office 365 Excel. Inferential statistics was applied to calculate the significance of collected data by using GraphPad Prism® version 5.01, USA. Student t test was applied to calculate difference between control and treated group. 0.05 *p*-value was considered to significant in the given analysis.

CHAPTER 4 : RESULTS

4.1. Metabolic profiling of root exudates

GCMS analysis was performed, and metabolic profile of each treatment was found. For identification at first all the compound from each treatment was compared with T3. compounds that matched the compounds of T3 were eliminated. The compounds that were found carbohydrates, amino acids, phenols, and amines. Metabolites differs from treatment to treatment which shows that different metabolites are released when exposed to different treated groups and these metabolites are expected to take part in the process of cadmium stress tolerance mechanisms.

Results of GCMS analysis/ metabolites identified are given under appendices.

4.2. Minimal to no changes in root architecture due to Cd

Roots of all treated groups were scanned and subjected to image analysis through GiaRoot. Representative scanned root images have been given in Fig 4.6. Seventeen parameters were automatically computed including average root width, Major Ellipse Axis, Minor Ellipse Axis, Maximum Number of Roots, Median Number of Roots, Network Bushiness, Network Depth, Network Length distribution, Network solidity, Network Width, Number of Connected Components, Specific Root length, Network Area, Network Length, Network Perimeter, Network Surface Area, Network Volume (Fig 4.1, 4.2, 4.3, 4.4, 4.5)

4.2.1. Average roots Width, Maximum Number of Roots, Median Number of Roots, Major Ellipse Axis

Average root width, Maximum Number of Roots, Median Number of Roots, Major Ellipse Axis were calculated for each treatment using GiaRoot. *t test* with welch correction analysis was applied to the values to compare control with each contaminated group and their *p-values* were calculated. Results have been illustrated by using graphical representations in fig. Where on x- axis treatments are given and, on the y-axis, mean values for the parameters are given. Error bars are shown on the top of each bar. Graphs shows the non-significance of results. Which indicates that these

parameters of *Brassica juncea* has no significant difference under cadmium stress. Major ellipse axis shows minimal significance in one of the treated groups.

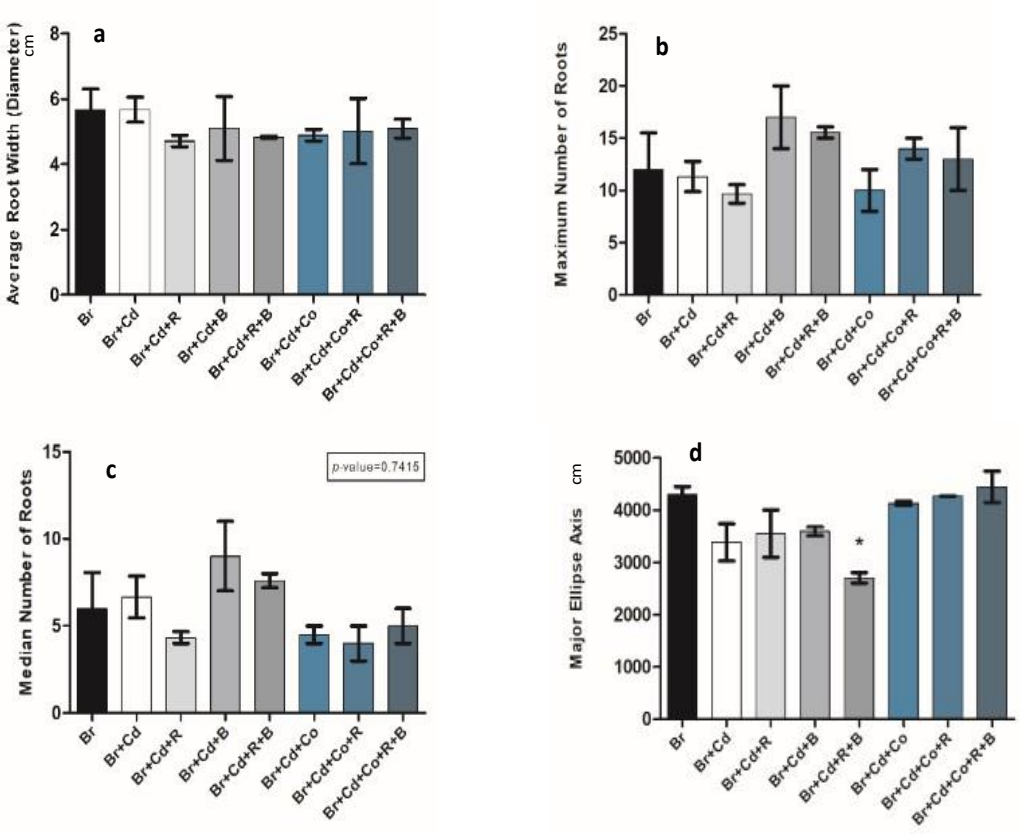


Fig 4.1: Bar Graphs of Treatments for a) Average root width, b) Maximum Number of Roots, c) Median Number of Roots, d) Major Ellipse Axis.

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

4.2.2. Minor Ellipse Axis, Network Bushiness, Network Depth, Network Length distribution

Minor Ellipse Axis, Network Bushiness, Network Depth, Network Length distribution was calculated for each treatment using GiaRoot. *t test* with welch correction analysis was applied to the values to compare control with each contaminated group and their *p-values* were calculated. Results have been illustrated by using graphical representations in fig. Where on x- axis treatments are given and, on the y-axis, mean values for parameters are given. Error bars are shown on the top of each bar. Graph shows the non-significance of results. Which indicates that theses parameters of *Brassica juncea* has no significant difference under cadmium stress. Minor ellipse axis shows minimal significance in one of the treated groups.

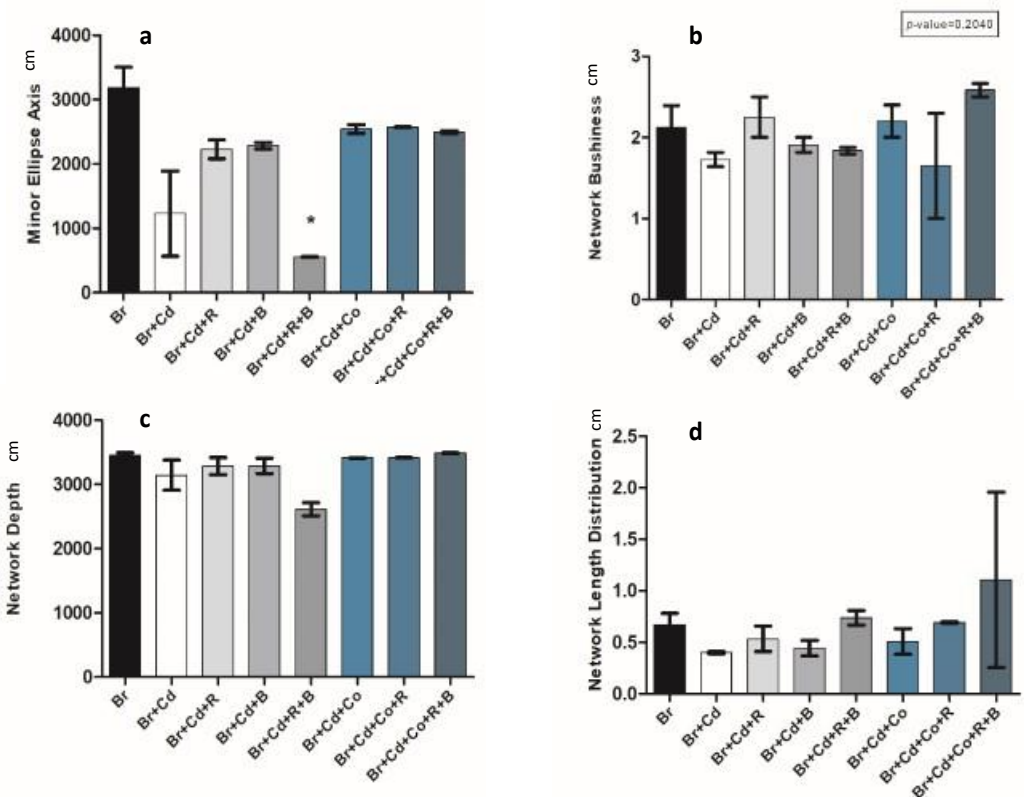


Fig 4.2 : Bar Graph of Treatments for a) Minor Ellipse Axis, b) Network Bushiness, c) Network Depth, d) Network Length distribution

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

4.2.3. Network solidity, Network Width, Number of Connected Components, Specific Root length

Network solidity, Network Width, Number of Connected Components, Specific Root length was calculated for each treatment using GiaRoot. *t test* with welch correction analysis was applied to the values to compare control with each contaminated group and their *p-values* were calculated. Results have been illustrated by using graphical representations in fig. Where on x- axis treatments are given and, on the y-axis, mean values for parameters are given. Error bars are shown on the top of each bar. Graph shows the non-significance of results. Which indicates that these parameters of *Brassica juncea* has no significant difference under cadmium stress. Network solidity and network width are showing minimal significance.

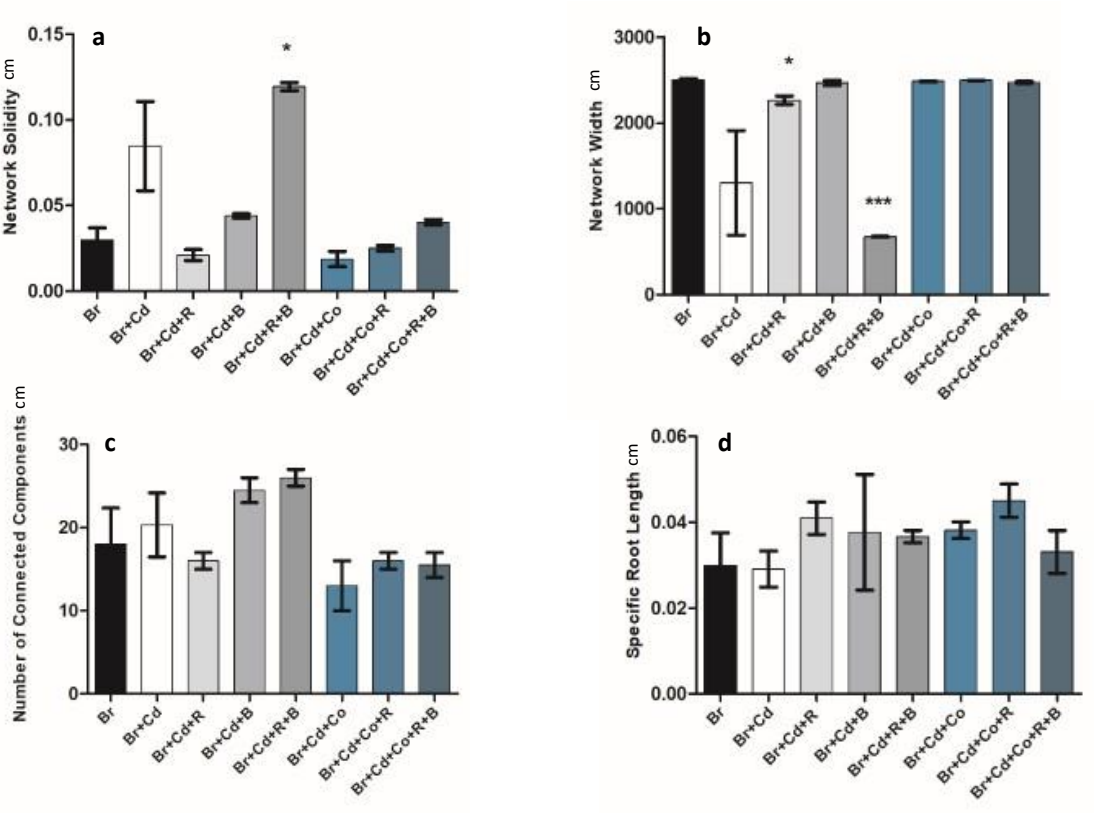


Fig 4.3: Bar Graphs of Treatments for a) Network solidity, b) Network Width, c) Number of Connected Components, d) Specific Root length

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

4.2.4. Network Area, Network Length, Network Perimeter, Network Surface Area, Network Volume

Network Area, Network Perimeter, Network Surface Area, Network Volume was calculated for each treatment using GiaRoot. *t test* with welch correction analysis was applied to the values to compare control with each contaminated group and their *p-values* were calculated. Results have been illustrated by using graphical representations in fig. Where on x- axis treatments are given and, on the y-axis, mean values are given. Error bars are shown on the top of each bar. Graphs shows the non-significance of results. Which indicates that these parameters of *Brassica juncea* has no significant difference under cadmium stress. Network volume shows minimal significance.

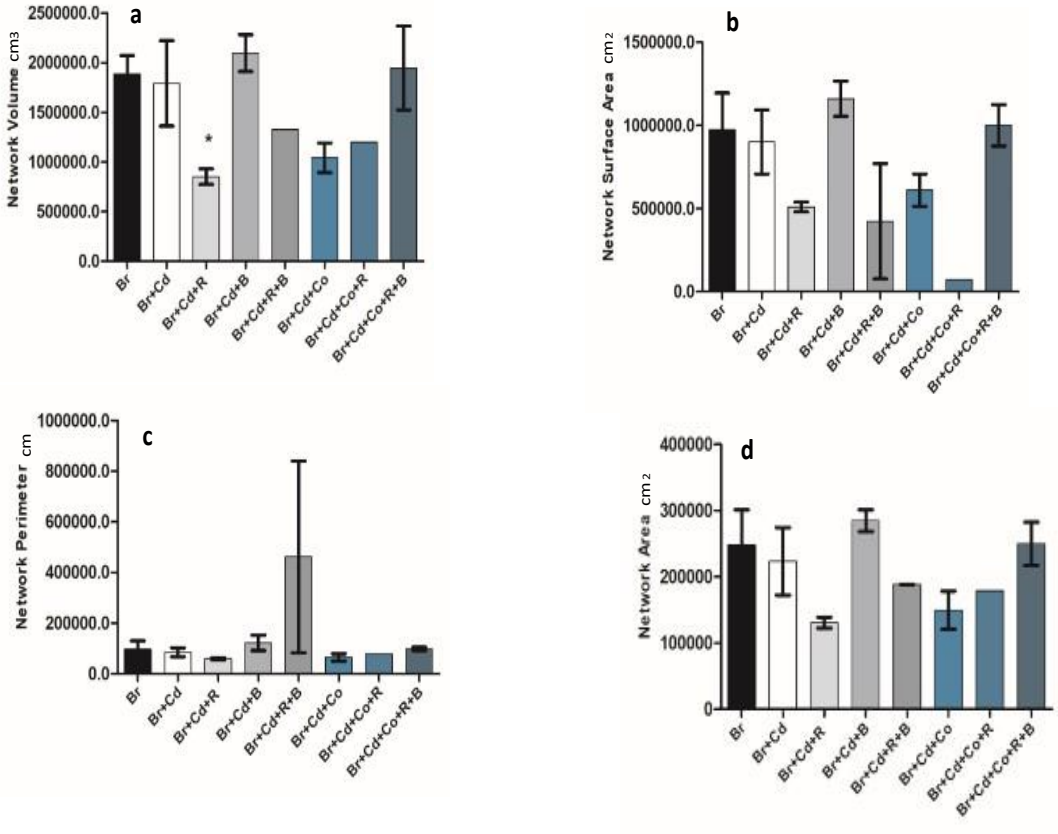


Fig 4.4: Bar Graph of Treatments for a) Network Volume, b) Network Surface Area, c) Network Perimeter, d) Network Area,

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

4.2.5. Network length

Network length was calculated for each treatment using GiaRoot. *t test* with welch correction analysis was applied to the values to compare control with each contaminated group and their *p-values* were calculated. Results have been illustrated by using graphical representations in fig. Where on x- axis treatments are given and, on the y-axis, mean values are given. Error bars are shown on the top of each bar. Graphs shows the non-significance of results. Which indicates this parameters of *Brassica juncea* has no significant difference under cadmium stress.

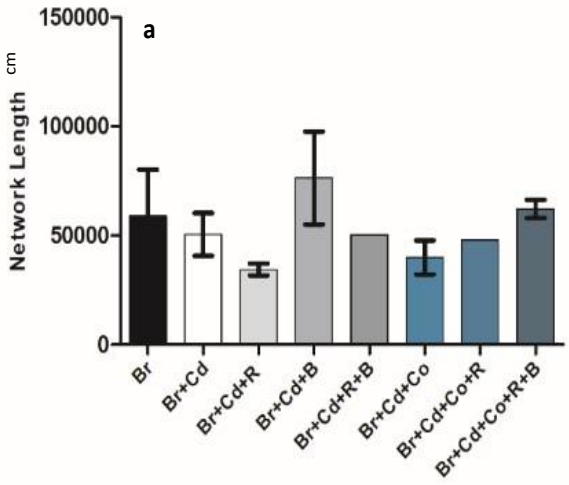


Fig 4.5: Bar Graph of Treatments for a) Network Length

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

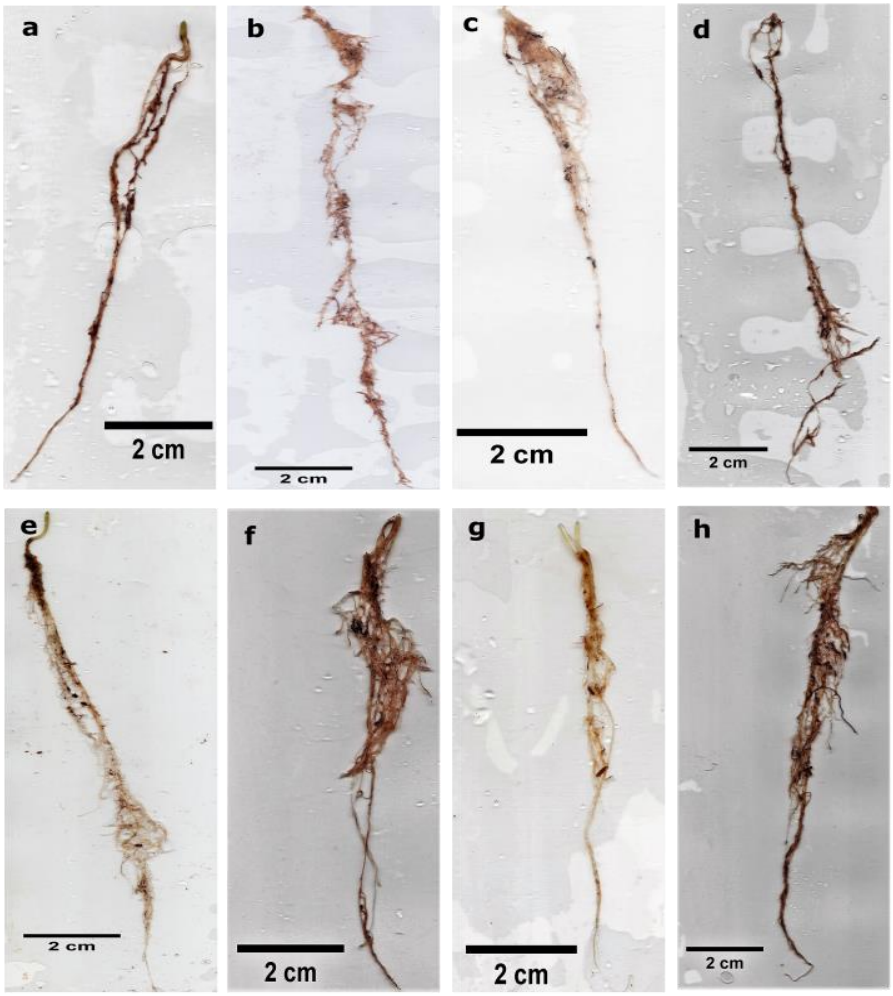


Fig 4.6: Representative images of scanned roots

Scanned root images of different treatments has been given in which a) Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which b) Br+Cd shows Brassica with cadmium, c) Br+Cd+R shows Brassica with Cadmium and Rhizobia, d) Br+Cd+B shows Brassica with Cadmium and Biochar, e) Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, f) Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, g) Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and h) Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

4.3. Microscopy

Microscopy of root hairs is done to examine the effect of cadmium on the number of root hairs or density. Density and length are calculated, and graph is generated by applying one way ANOVA which shows significance. Control and treated groups are compared using t-test. The graph shows significant values which supports the hypothesis that the root hair density is increased when *Brassica juncea* is under cadmium stress and increase in density is its adaptation strategy to counter cadmium stress.

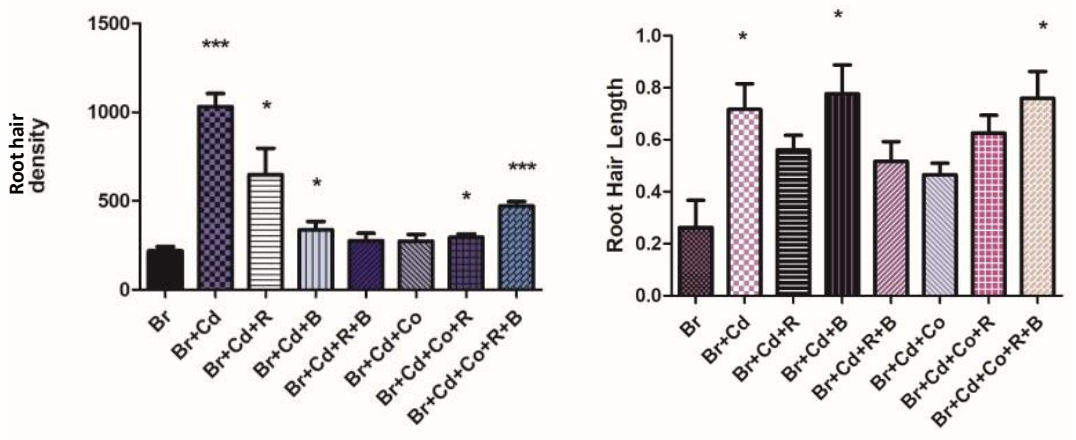


Fig 4.7: Bar Graphs for Root Hair Density and Length

Bar graph has been given where different colors indicate different treatments that is Br is indicating the control which sole Brassica whereas rest of other treatments are contaminated ones in which Br+Cd shows Brassica with cadmium, Br+Cd+R shows Brassica with Cadmium and Rhizobia, Br+Cd+B shows Brassica with Cadmium and Biochar, Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, Br+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

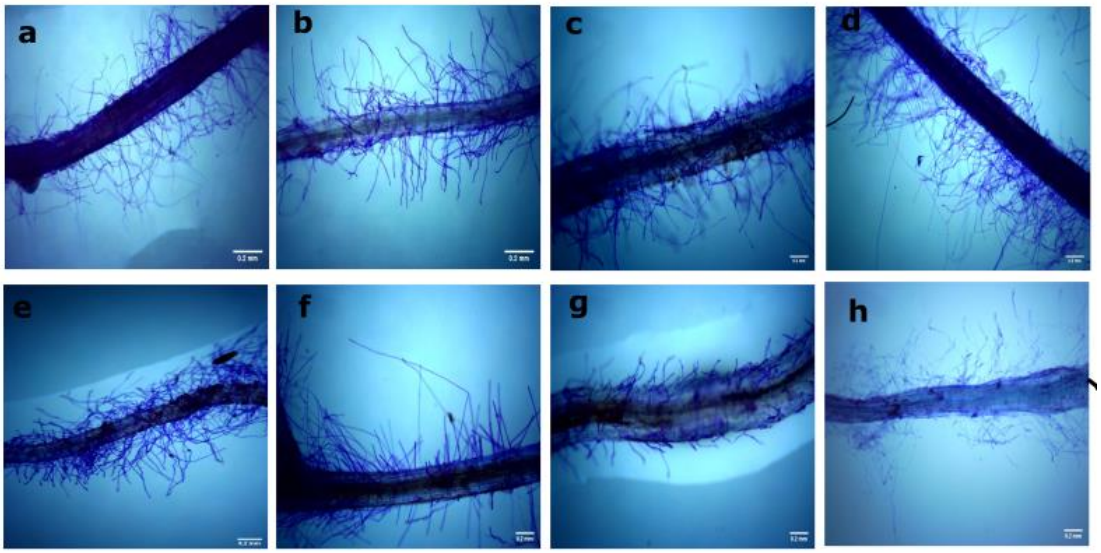


Fig 4.8: Representative Images of microscopy

Microscopic images of root hairs has been given in which a) Br is indicating the control which is sole Brassica whereas rest of other treatments are contaminated ones in which b) Br+Cd shows Brassica with cadmium, c) Br+Cd+R shows Brassica with Cadmium and Rhizobia, d) Br+Cd+B shows Brassica with Cadmium and Biochar, e) Br+Cd+R+B shows Brassica with Cadmium, Rhizobia, BioChar, f) Br+Cd+Co shows Brassica with Cadmium and Coplanted legume, g) Br_+ Cd+Co+R shows Brassica with Cadmium, Coplanted legume and Rhizobia and h) Br+Cd+Co+R+B shows Brassica with Cadmium, Coplanted legume, Rhizobia and Biochar.

CHAPTER 5 : DISCUSSION

Heavy metal contamination is emerging as a worldwide concern (Gill, 2014). Cadmium is also a heavy metal and causing hazardous effects on crops particularly in the developing countries disturbing the food chain. Food containing cadmium in it is also causing bad effects on human health (Haider et al., 2021). To counter this growing threat there are various techniques and methods that have been developed. For instance, a reusable device has been developed to mitigate cadmium. The device contains components including cation exchange resin (CER), biochar (BC), and steel slag (SS). Passivation is another method but it is only capable of reducing bioavailability of cadmium in the soil rather than removing Cd from the soil (Zhang et al., 2021). Optimum plant nutrition is also another method in this regard but this is also only capable of reducing the hazardous effects of the cadmium and preventing the cadmium to enter in the food chain (Haider et al., 2021).

Hence, there is a in need of a solution that is cost effective, harm less and most of all a remedy that is sustainable. Phytoremediation has been considered as the sustainable solution for detoxifying the soil contaminated with the cadmium. *Brassica juncea* has been considered as a good model plant in this regard. In which it is easy to understand metabolic pathways and networks as well as the phenomenon of hyperaccumulation of cadmium that is the cadmium tolerance in cadmium rich plants (Kumar et al., 2017). Considering the plant there are basically two parts of the plant that is the above ground parts and below ground part.

Rhizosphere is that zone of the underground soil which is directly connected to the living roots. This is the zone where root exudates play its role in making or altering the environment of the plants. Concisely it is that part of the soil ecosystem where the roots of the plants, soil, many biotic and abiotic factors of the soil communicate with each other (Lynch et al., 2001).

Soil metabolomics is basically considered to be useful in understanding the changes in soil and root regulation. Root exudates are basically the metabolites that are released in the rhizosphere to increase the nutrient uptake or to counter the environment stress

conditions (Luo et al., 2017). In this study GC MS analysis was performed for the metabolic profiling of root exudates. Many different treatments have been used including Co- planting, Rhizobia and Bio char. In order to find out metabolites that differ among these groups, all the metabolites of the treatments and control groups are compared, common and unique metabolites were identified. By this many hydrocarbons and organic compounds are identified that are different in the treated groups indicating that heavy metals and rhizosphere interferes in the soil metabolic profile. This is because to adjust with the environment the plants release some metabolites into the rhizosphere and soil changes their metabolic profile. Similar experiment was conducted by (Qian et al., 2022) in it is concluded that heavy metals significantly interferes with the metabolic profile of soil.

No significant changes are observed in the root architecture or the root morphology of the plants. The results are similar to (Filek et al., 2008) in which it is stated that the upper parts of the plant is more sensitive to the morphological changes in response to cadmium than the below ground part. The transport of Cd takes place through membrane permeability and cation channel activity. Changes in the root architecture can be seen when cadmium is given in high concentrations such as (800 mM or higher). However, even in the small concentrations significant changes occur in the microscopic level that is in the root hairs. Upon microscopy of root hairs significant changes were observed when root hair density and length were calculated and analyzed. This is also due to the adaptation strategy of the plant when encountering the heavy metal stress. Similar matter is discussed in a research article by (Bahmani et al., 2016) in increase in root hair length and density in response to cadmium is referred.

Precisely, it Is concluded that metabolic changes and chemical communication takes place in rhizosphere of *Brassica juncea* in response to cadmium trafficking. Considering the metabolites that are identified It is suggested that many different partners such as rhizobia, co-planting and organic amendment also play their role in the enhancement of phytoremediation.

APPENDICES

T1	T2	T4	T5
(1-Cyanocyclohexyl) carbamate	(1S,4R,5R)-1,3,3-Trimethyl-2-oxa	(1-Hydroxy-1-methyl-2-trimethyls	(-)-Isolongifolol, picolinyloxydim
(1R,2S,8As)-8-oxo-1-carboxymet	(5S,6aR,11aS)-5-Pentyldecahydro	(1R,2R,8S,8Ar)-8-hydroxy-1-(2-a	(-)-Isolongifolol, TMS derivative
(2,7-Octadienyl)succinic anhydrid	(Z)-Decyl icos-9-enoate	(1R,2S,8R,8Ar)-8-hydroxy-1-(2-h	(1-Ethylpyrrolidin-3-yl)methanam
(2E,4E)-N-Isobutyltetradeca-2,4-d	(Z)-Non-3-en-1-yl 2-methylbutano	(1S,3aR,4R,8R,8aS)-1-Isopropyl-	(1R,2S,8R,8Ar)-8-acetoxy-1-(2-h
(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	.alpha.-D-Glucopyranoside, methy	(2,2-Dimethylcyclobutyl)methyla	(1R,4aR,8aR)-2,5,5,8a-Tetramethy
(3E,10Z)-Oxacyclotrideca-3,10-di	.delta.-Tocopherol, TMS derivativ	(2E,4E,10E)-N-Isobutylhexadeca-	(1S,2R,4R,7R)-4-Isopropyl-7-met
(3E,6E)-Nona-3,6-dienyl 2-methy	[1,2,4]Triazolo[1,5-a]pyrimidine-6	(2-Isopropyl-5,5-dimethyl-cyclohe	(2,2,6-Trimethyl-bicyclo[4.1.0]hep
(5S,6aR,10aS)-5-Propyldecahydro	1-(2-Methylbutoxy)-7-pentyl-2,2,	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	(22S)-21-Acetoxy-6.alpha.,11.beta
(7-Methoxy-tetrazolo[1,5-a][1,3,5	1-(3,3-Dimethyl-but-1-ynyl)-2,2,3	(4-Benzo[1,3]dioxol-5-yl-4,5-dihy	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4
(Nonafluoro-tert-butyl) benzene	1-(3-Cyanopropyl)-4-(2-methoxyp	(4Z)-5-Chloro-3,4-dimethyl-2,4-h	(2S,3S,6S)-6-Isopropyl-3-methyl-
(t-Butyl-dimethylsilyl)[2-methyl-2	1(3H)-Isobenzofuranone, 6,7-dime	(5S,6aR,11aS)-5-Pentyldecahydro	(3E,10Z)-Oxacyclotrideca-3,10-di
.alpha.-D-Glucopyranoside, 1-O-m	1,1,3,3,5,5-Hexamethyl-1,5-bis(2-	(7R,8R)-Ethyl 8-hydroxy-trans-bi	(3-Fluorophenyl)(furan-2-yl)meth
.alpha.-D-Glucopyranoside, methy	1,2-benzenedicarboxylic acid, 3-n	(R)-(+)-Arachidonyl-1\\ffffff92-hy	(4R,S)-4-(2-Butyl)-cis-bicyclo[4.3
[1,2,4]Triazolo[1,5-a]pyrimidin-5-	1,2-Bis(trimethylsilyl)benzene	(S)-(+)-5-Methyl-1-heptanol	(5R,6aR,11aS)-5-Propyldecahydro
[1,2,4]Triazolo[1,5-a]pyrimidine-6	1,2-trans-1,5-trans-2,5-dihydroxy-	(Z)-Ethyl heptadec-9-enoate	(5S,6aR,10aS)-5-Propyldecahydro
[1,3,5]Triazine-2-carboxamidine,	1,4-Benzenediol, 2,5-bis(1,1-dime	.alpha.-N-Normethadol	(6Z,9Z,12Z)-1,3-Dimethoxypropa
1-(3,4-Methylenedioxybenzyliden	1,4-Bis(trimethylsilyl)benzene	.beta.,.beta.-Galactonic phenylhyd	(7a-Isopropenyl-4,5-dimethyloctah
1-(4-Chlorophenoxy)-1-(1H-imida	1,4-Methanoazulen-3-ol, decahyd	.beta.,.epsilon.-Carotene-3,3'-diol,	(E)-3(10)-Caren-4-ol
1-(9-Allyl-9-azabicyclo[3.3.1]non	1,5,9,9-Tetramethyl-2-oxatricyclo[	.beta.-Alanine, N-(trifluoroacetyl)	(t-Butyl-dimethylsilyl)[2-methyl-2
1-(t-Butyloxycarbonylamino)-7-gu	1,8-Dioxa-5-thiaoctane, 8-(9-bora	[1,1'-Bicyclohexyl]-4-carboxylic a	(Z)-1,3-Dimethoxypropan-2-yl tet
1,1'-(4-Methyl-1,3-phenylene)bis[	1,9-Dioxa-5-thianonane, 3,7-bis(9	[1,1'-Bicyclopropyl]-2-octanoic ac	(Z)-3,7,11-Trimethyldodec-2-enoi
1,1,3,3,5,5,7,7-Octamethyl-7-(2-m	1,9-Nonanediol	[1,2,4]Triazolo[1,5-a]pyrimidine-5	(Z)-Methyl heptadec-9-enoate
1,1,3,3-Tetraallyl-1,3-disilacyclob	10,11-Dimethyl-tricyclo[4.3.1.1(2	[1,2,4]Triazolo[1,5-a]pyrimidine-6	(Z)-Oxacyclopentadec-6-en-2-one
1,2,4-Cyclopentanetriol	10-Methyl-10-nonadecanol	[2,5-Dioxo-1-(m-tolyl)-3-pyrrolidi	.alpha.-D-Galactopyranoside, met
1,2,4-Triazol-3-amine, 5-(1,3,5-tri	11-Hexadecenoic acid, 15-methyl-	1-(.beta.-d-Arabinofuranosyl)-4-di	.pi.-Pentamethylcyclopentadienyl-
1,2,5-Oxadiazol-3-amine, 4-(3-me	11-Hexadecynal	1-(.beta.-d-Arabinofuranosyl)-4-O	[1,1'-Bicyclohexyl]-4-carboxylic a
1,25-Dihydroxyvitamin D3, TMS	13-Octadecenoic acid, (E)-, TMS	1-(.beta.-d-Ribofuranosyl)-4-diflu	[1,1'-Bicyclopropyl]-2-octanoic ac
1,2-Benzenediol, 3,5-bis(1,1-dime	16-Trimethylsilyloxy-9-octadecen	1-(1-Adamantyl)-1-phenylethanol	[1,2,4]Triazolo[1,5-a]pyrimidine-6
1,2-Bis(trimethylsilyl)benzene	1-Amininonadecane, N-trifluoroa	1-(1-Hydroxyethyl),1-(hydroxyme	[1,3,5]Triazine-2-carboxylic acid,
1,3,5-Triazine-2,4-diamine, 6-hyd	1-Hexanethiol, 2-ethyl-	1(2H)-Pyrazinecarboxamide, tetra	1-(.beta.-d-Arabinofuranosyl)-4-O
1,3,5-Triazine-2,4-diamine, N,N'-b	1-Hexanol, 2-ethyl-	1-(3-(Cyclohexylamino)propyl)gu	1-(.beta.-d-Ribofuranosyl)-4-diflu
1,3-Benzodioxole, 5-[1-[2-(2-buto	1-Hexene, 3,5,5-trimethyl-	1-(3,4-Methylenedioxybenzyliden	1-(2,4-Dichlorobenzenesulfonyl)-
1,3-Butadiene, (Z,E)-2,3-dipropyl	1H-Indole-2,3-dione, 5-chloro-1-(	1-(3-Fluorophenyl)-5-methyl-1,2,	1-(3,3-Dimethyl-but-1-ynyl)-2,2,3
1,3-Dimethoxypropan-2-yl oleate	1-Phenanthrenecarboxylic acid, 1,	1-(4-Chlorophenoxy)-1-(1H-imida	1-(4-Bromophenylthio)dodecane
1,3-Dimethyl-7-(5H-tetrazol-5-ylm	1-Phenyl-2-hexanone	1-(7-Isopropenyl-6-methoxy-3,3-d	1-(4-Chlorophenoxy)-1-(1H-imida
1,3-Hexanediol, 2-ethyl-	1R-Ethoxy-3-trans-methoxy-2-cis	1-(t-Butyldimethylsilyl)-3,7-dimet	1,1'-(4-Methyl-1,3-phenylene)bis(
1,4-Benzenediol, 2,5-bis(1,1-dime	2(1H)-Naphthalenone, octahydro-	1,1,1,3,5,5,5-Heptamethyltrisiloxa	1,1,2,2,3,3-Hexamethyltrigermane
1,4-Bis(trimethylsilyl)benzene	2-(2-Furyl)pyridine	1,1,1,4-Tetramethyl-4-chloro-4-vin	1,1,3,3-Tetraallyl-1,3-disilacyclob

1,4-Cyclohexanedimethanamine	2(3H)-Furanone, dihydro-4-methy	1,1,3,3,5,5,7,7-Octamethyl-7-(2-m	1,1-Cyclopropanedicarboxamide
1,5,9,9-Tetramethyl-2-oxatricyclo[	2-(Acridin-9-ylamino)-3-methyl-b	1,1,3,3-Tetra-tert-butyl-2-phenylsu	1,2,2,3,4-Butanepentacarbonitrile
1,7-Di(dodec-9-ynyl)-2,2,4,4,6,6-	2,2-Difluoroheptacosanoic acid	1,10-Decanediol, 2TMS derivative	1,2,3,5,9b-Pentaazacyclopenta[a]n
1,8-Dioxa-5-thiaoctane, 8-(9-bora	2,2-Dimethoxybutane	1,10-Decanedithiol	1,2,3-Triazole-4-methanol, 1-(4-a
1,9-Nonanediol, 2TMS derivative	2,2-Dimethyl-6-methylene-1-[3,5-	1,11-Dibromoundecane	1,2,4-Trioxolane-2-octanoic acid,
1.alpha.-(Acetoxymethyl)-7.alpha.	2,3-Dihydroxypropyl icosanoate,	1,11-Undecanediol, 2TMS derivat	1,2,5-Oxadiazole-3-acetic acid, 4-
1-[1-(4-Aminofurazan-3-yl)-5-met	2,3-O-Benzal-d-mannosan	1,1'-Bicyclohexyl, 2-propyl-trans	1,22-Docosanediol, 2TMS derivat
1-[3-(2,6-Di-t-butyl-4-methoxyph	2,4(1H,3H)-Pyrimidinedione, 6-a	1,1-Dimethyl-3-[2,2,2-trifluoro-1-	1,25-Dihydroxyvitamin D3, TMS
10-Methylene-tricyclo[4.3.1.1(2,5	2,4,6,8-Tetrathiatricyclo[3.3.1.1(3	1,2,3,4,5,8-Hexahydro-7-methoxy	1,2-benzenedicarboxylic acid, 3-n
11-Hexadecenoic acid, 15-methyl-	2,4,6-Cycloheptatrien-1-one, 3,5-	1,2,3,4-Butanetetracarboxylic acid	1,2-Benzenediol, 3,5-bis(1,1-dime
13-Methyltetradec-9-enoic acid, T	2,4,6-Cycloheptatrien-1-one, 3,5-b	1,2,4-Benzenetricarboxylic acid, 1	1,2-Benzisothiazol-3-amine, TMS
15-nor-Prezizaan-7-one	2,4,6-Trichlorobenzonitrile	1,2,4-Oxadiazole-5-propanamide,	1,2-Bis(trimethylsilyl)benzene
17-Octadecynoic acid, methyl este	2',4'-Dihydroxyacetophenone oxim	1,2,4-Triazol-3-amine, 5-(1,3,5-tri	1,2-Bis[1-(2-hydroxyethyl)-3,6-di
18-O-Feruloyloxyoctadec-9-enoic	2,4-Pentanediol, 3-methyl-	1,2,4-Trioxolane-2-octanoic acid,	1,2-Cyclopropanediacetic acid
1-Benzazirene-1-carboxylic acid,	2,5-dimethoxy-4-ethylthionitrosty	1,2,5-Oxadiazol-3-amine, 4-[5-(2,	1,2-Diazabicyclo[2.2.2]octan-3-on
1-Bromo-5-nonene, (Z)-	2,5-Dimethyl-1-aza-bicyclo[2.2.1]	1,25-Dihydroxyvitamin D3 TMS	1,2-Epoxynonane
1-Carboethoxypiperazine-4-thioca	2,6-Lutidine 3,5-dichloro-4-dodec	1,2-Benzenediol, 3,5-bis(1,1-dime	1,2-trans-1,5-trans-2,5-dihydroxy-
1-Cyclohex-1-enyl-1-phenyl-ethan	2-[2-(2-Butoxyethoxy)ethoxy] Ac	1,2-Bis(trimethylsilyl)benzene	1,3,2-Dioxaphosphorinane, 2-met
1-Cyclohexyl-2-cyclohexylideneth	2-[3-(4-tert-Butyl-phenoxy)-2-hyd	1,2-Cycloheptanediol, trans-(.+/-.)	1,3,5-Triazine, 2,4-bis(4-morpholy
1-ethoxy-2,4-hexadiene	2'-Amino-4'-methoxyacetanilide	1,2-dihydro-8-hydroxylinalool	1,3,5-Triazine-2,4-diamine, N(2)-e
1H-1,2,3-Triazol-5-amine, 1-(3-flu	2-Butanol, 2-methyl-, acetate	1,2-Longidione	1,3,5-Triazine-2,4-diamine, N,N'-b
1H-Cyclopropa[3,4]benz[1,2-e]az	2-Carbamyl-9-[.beta.-d-ribofurano	1,2-O-Isopropylidene-3-O-methan	1,3,7-Trimethylthiazolo[2,3-f]puri
1H-Dibenzo[a,i]fluorene, 13-(deca	2-Furanmethanediol, dipropionate	1,2-Oxaphosphole, 2-chloro-3,5-b	1,3:2,5:4,6-Trimethylene-d-glycer
1-Hexen-3-yne, 2-tert-butyl-	2-Heptene, 1-ethoxy-, (Z)-	1,3,2-Dioxaphosphorinane, 2-etho	1,3-bis([(2Z)-3,7-Dimethylocta-2,
1H-Imidazole-2-carboxaldehyde, 2	2-Heptyn-1-ol	1,3,3-Trimethylcyclohex-1-ene-4-	1,3-Cyclohexanedione, 4,4-dimeth
1H-imidazole-2-methanol, 1-decyl	2-Hexanol, acetate	1,3,4-Thiadiazol-2-amine, 5-(2,2-d	1,3-Dicyclohexyl-1-[5-phenyl-2,4
1H-imidazole-2-methanol, 1-dode	2H-Pyran, 2-(7-heptadecynyloxy)t	1,3,5-triazine-2,4,6-triamine, N2,N	1,3-Dioxane-5-methanol, 5-ethyl-
1H-indene-5-carboxylic acid, 3-(4	2H-Pyrrol-2-one, 4-acetyl-5-(2-flu	1,3,5-Triazine-2,4-diamine, 6-hyd	1,3-O-Benzylidene glyceryl-2-myr
1H-Purine-2,6-dione, 7-ethyl-3,7-	2H-Quinolizine-1-methanol, octah	1,3,5-Triazolidine-2-thione, 5-met	1,3-Propanediol, decyl ethyl ether
1-Isobenzofuranol, 1,3-dihydro-3,	2-Isopropenyl-4,4,7a-trimethyl-2,4	1,3-Adamantanedicarboxylic acid,	1,4-Benzenedicarboxylic acid, bis
1-Methyl -3H,4H,5H-pyrrolo[1,2-	2-Methoxy-1-oxaspiro[4.4]nonane	1,3-Benzodioxol-2-amine, hexahy	1,4-Benzenediol, 2,5-bis(1,1-dime
1-Octanol, 3-(2-methoxyethyl)-, T	2-Myristynoyl-glycinamide	1,4,6,9-Tetraoxa-5-phosphaspiro(4	1,4-Bis(trimethylsilyl)benzene
1-Octyl trifluoroacetate	2-Nitro-4-(trifluoromethyl)phenol	1,4,7,10-Tetraoxa-13-azacyclopen	1,4-Dichloro-2,5-di(chloromethyl)
1-Phenylthio-1-isobutylthio-2-eth	2-Oleoylglycerol, 2TMS derivativ	1,4-Benzenediol, 2,5-bis(1,1-dime	1,4-Piperazinediethanol, .alpha.,.a
1-Undecen-3-ol, 1-phenyl-	2-Pentanol, acetate	1,4-Benzenediol, 2,6-bis(1,1-dime	1,6-Bis(2-propyn-1-yloxy)hexane
2-((2S,4aR)-4a,8-Dimethyl-1,2,3,4	2-Phenoxyethanol, n-pentyl ether	1,4-Bis(trimethylsilyl)benzene	1,6-Bis[dimethyl(pentafluorophen
2(1H)-Azocinone, 3,3-dichlorohex	3-([4-(4-Fluorophenyl)-5-methyl-2	1,4-Di-(2-chloroacetyl)-piperazine	1,6-Octadiene, 2,5-dimethyl-, (E)-
2(1H)-Naphthalenone, octahydro-	3-(1,3-Dihydroxyisopropyl)-1,5,8,	1,4-Dioxan-2,5-diol, di(pentafluor	1,9-Dioxa-5-thianonane, 3,7-bis(9
2-(2,7-Dimethylocta-2,7-dienyl)m	3-(4-Bromobenzoyl)-2-(.gamma.-	1,4-Eicosanediol	1,9-Nonanediol, 2TMS derivative
2-(4a,8-Dimethyl-6-oxo-1,2,3,4,4a	3-(Toluene-4-sulfonyloxy)butyric	1,4-Phthalazinedione, 2,3-dihydro	1.alpha.-(Acetoxymethyl)-7.alpha.
2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,	3,3,6,6,9,9,12,12-Octachloropenta	1,5,9,9-Tetramethyl-2-oxatricyclo[	1-[1-(1-Cyclohexyl-1H-tetrazol-5-
2,2,4,4,8,8,10,10-Octamethyl-3,9-	3,3-Dimethyl-4-heptanol	1,5-Diazabicyclo[3.1.0]hexane, 6-	1-[2-Deoxy-.beta.-d-erythro-pento
2,2,4,4-Tetramethyl-6-(1-oxo-3-ph	3,4,4,-Trimethyl-1-pentyn-3-ol	1,6-Cyclodecanediol	1-[5-Nitro-6-uracilyl]-2-[4-fluorop

2,2,6-Trimethyl-1-[2-(2-methyl-[1,	3,6-Dimethyl-4-prop-2-en-1-yl-2,6	1,7-Di(dodec-9-ynyl)-2,2,4,4,6,6-	10,12-Tricosadiynoic acid, methyl
2,2-Dimethoxybutane	3.beta.-Acetoxy-bisnor-5-cholena	1,7-Dioxadispiro[4.0.5.3]tetradec-	10-Heptadecen-8-ynoic acid, meth
2,3-Dihydroxybenzoic acid, 3TM	3-[3-[1-Aziridinyl]propoxy]-2,5-d	1,8-Diethyl-3,6-diazahomoadaman	11-Bromo-1-undecanol, TMS deri
2,4(1H,3H)-Pyrimidinedione, 5-m	3-Azabutanol, 4-[2-phenylcyclopr	1,8-Dioxa-5-thiaoctane, 8-(9-bora	11-Hexadecenoic acid, 15-methyl-
2,4(1H,3H)-Pyrimidinedione, 6-a	3-Chloro-2,2-dimethyl-1-propanol	1.alpha.-(Hydroxymethyl)-7.alpha	11-Methyl-13-tetradecen-1-ol acet
2,4,1-Benzoxazin-1-one, 3-trifluo	3-Chloropropanoic acid, 6-ethyl-3	1-[2-Methoxy-5-nitrobenzyl]-4-m	12,15-Octadecadiynoic acid, meth
2,4,6-Cycloheptatrien-1-one, 3,5-	3-Chloropropionic acid, 2,6-dimet	1-[Amino-(6-ethoxy-4-methyl-qui	12-Hydroxy-3-keto-bisnor-4-chole
2,4,6-Cycloheptatrien-1-one, 3,5-b	3-Cyclopentylpropionic acid, hept	10.alpha.-Eremophilane	12-Methyloctadec-11-enoic acid t
2,4-Di-tert-butylthiophenol	3-Ethoxy-1,1,1,5,5,5-hexamethyl-	10-Undecynoic acid, methyl ester	14.beta.,17.alpha.-Pregn-5-en-20-
2,5-Dimethylhexane-2,5-dihydrop	3-Methoxy-2,4,5-trifluorobenzoic	11,13-Dihydroxy-tetradec-5-enoic	14-Methyl-14-(3-oxobutyryloxy)-
2,5-Octadecadienoic acid, methyl	3-Methyl-7-(4-methyl-piperazin-1	11-Hexadecenoic acid, 15-methyl-	15-Hydroxypentadecanoic acid
2,6-Diamino-4-hexenoic acid	3-Methylpyrazolobis(diethylboryl	11-Hydroxy-11-methyl-tricyclo[4.	17a-Allyl-3.beta.-methoxy-17a-az
2,6-Dihydroxybenzaldehyde, carb	4-(2-Methoxyphenyl)piperidine	11-Octadecenoic acid, methyl este	17-Octadecynoic acid, methyl este
2,6-Lutidine 3,5-dichloro-4-dodec	4,6-decadiynedioic acid, dimethyl	11-Tricosene	18,19-Secolupan-3-ol, (3.beta.,17.
2-[2-(2-Butoxyethoxy)ethoxy]-Ac	4,6-di-tert-Butylresorcinol	12-Oxooctadecanoate, TMS deriva	18-Pentatriacontanone
2-[3-(4-tert-Butyl-phenoxy)-2-hyd	4.alpha.,5.beta.-Epoxy-9.alpha.-hy	14-Oxabicyclo[10.3.0]pentadecan	1-Aza-2-sila-5-boracyclopent-3-en
2-[4-Cyclohexylbutanoylamino]-3	4-[3-Pyridylmethyll]-3-thiosemica	15-Octadecenal	1-Azabicyclo[2.2.2]octane, 2-chlo
2-[N'-(3-Methoxy-benzylidene)-hy	4a,7,7,10a-Tetramethyldodecahydr	17.alpha.-Hydroxyprogesterone, tr	1b,4a-Epoxy-2H-cyclopenta[3,4]c
20,24-Diacetamido-2,3,11,12-dibe	4-Chloro-3-n-hexyltetrahydropyra	17-Acetyl-14-hydroxy-16-methox	1-Benzamido-N-benzyl-1-[.alpha.
2-Adamantylamine, N-acetyl-	4-Hydroxybenzoic acid, 2TMS de	1-Aminoguanosine	1-Benzazirene-1-carboxylic acid,
2-Amino-3-(2-methylpropylidene)	4-Methyl-2-mercaptopyridine-1-o	1-Bromo-4-chloro-2-fluorobenzen	1-Cyano-5-(1-methylethyl)-2-oxa-
2-Bromolauric acid	4-Pyridinamine, N-cyclohexyl-3-n	1-Butanamine, 3-methyl-N-(3-met	1-Decene, 4-methyl-
2-Bromotetradecanoic acid	4-tert-Butylphenol, TMS derivativ	1-Butyryloxymethyl-3-iodomethyl	1-Dimethyl(3-chloropropyl)silylo
2-Butanone, 4-(2,2,6-trimethylcyc	5-(7a-Isopropenyl-4,5-dimethyl-oc	1-Decanol, 2-ethyl-	1-Ethynyl-3,trans(1,1-dimethyleth
2-Carbamyl-9-[.beta.-d-ribofurano	5,6,7-Trimethoxy-1-indanone	1-Decen-4-yne, 2-nitro-	1H-1,2,3,4-Tetrazole-1-acetamide,
2-Chloro-5-iodobenzamide	5H-1,4-dithiepin, 6,7-dihydro-2-p	1-ethoxy-2,4-hexadiene	1H-1,2,3-Triazole-4-carboxylic ac
2-Cyclopenten-1-one, 5-hydroxy-	5H-Benzo[b]pyran-8-ol, 2,3,5,5,8	1-Ethynyl-3,trans(1,1-dimethyleth	1H-1,2,4-Triazole, TMS derivative
2-Cyclopropylvinylidene-3-metho	5-Hexyl-1,3-oxathiolan-2-one	1H,3H-Pyrrolo[1,2-c][1,3,2]oxaza	1-Heptanol, 2,4-dimethyl-,
2-Decalone,c&t	5-Methylsalicylic acid, 2TMS der	1H-1,2,3,4-Tetrazole-1-propanami	1-Heptatriacotanol
2'-Deoxyguanosine, tris(trimethyls	5-Methylsalicylic acid, 2TMS deri	1H-1,2,3-Triazole-4-carboxylic ac	1-hexadecanesulfonamide, N-[3-[2
2-Dodecen-1-yl(-)succinic anhydr	6,9,12,15-Docosatetraenoic acid,	1H-3a,7-Methanoazulene-6-metha	1H-imidazole-2-methanol, 1-decyl
2-Furanmethanediol, dipropionate	6-Chlorohexanoic acid, TMS deri	1-Hexadecanesulfonic acid, 3,5-di	1H-imidazole-2-methanol, 1-dode
2H-3,9a-Methano-1-benzoxepin, o	7,7,9,9,11,11-Hexamethyl-3,6,8,1	1-Hexanol, 2-ethyl-	1H-indene-5-carboxylic acid, 3-(4
2H-Cyclopenta[a]phenanthrene-3,	7-Methyl-Z-tetradecen-1-ol acetat	1-Hexen-3-ol, 5-nitro-1-phenyl-, (	1H-Indole-2,3-dione, 1-(tert-butyl
2-Hepten-4-one, 6-hydroxy-2-met	9,12-Octadecadienoic acid (Z,Z)-,	1-Hexene, 5,5-dimethyl-	1H-Pyrazole-1-acetamide, 4-iodo-
2-Hexene, 1-(1-ethoxyethoxy)-, (E	9-Octadecenoic acid, methyl ester,	1H-Imidazole-1-ethanol, 2-heptad	1-Hydroxy-3-(phenylsulfanyl)anth
2H-Pyran, 2-ethenyltetrahydro-2,6	9-Octadecynoic acid, methyl ester	1H-imidazole-2-methanol, 1-decyl	1-Methyl-8-propyl-3,6-diazahomo
2H-Pyran-2-acetic acid, tetrahydro	9-Oxononanoic acid	1H-indene-5-carboxylic acid, 3-(4	1-Naphthalenepropanol, .alpha.-et
2'-Hydroxypropiophenone, TMS d	Acetic acid, 10-chlorodecyl ester	1H-Pyrazole, 1-(3-methylbutyl)-4-	1-O-Retinoyl .beta.-D-methyl-2',3'
2-Isoquinolinecarboximidamide, 1	Acetic acid, 17-acetoxy-4,4,10,13-	1H-Pyrazole-1-acetamide, N-(2-et	1-Oxa-3-azaspiro[4.5]decan-2-one
2-Methylbenzo[e][1,3]oxathiane	Acetic acid, butyl ester	1H-Pyrrole-3-propanoic acid, 2-(e	1-Oxaspiro[2.2]pentane, 5-isoprop
2-Methylcortisone	Acetic acid, pentyl ester	1-Methyl-3-acetoxy-azacyclohexa	1-Phenyl-2,3-dimethyltetrahydrop
2-Naphthalenecarboxylic acid, 4,4	AM3102	1-naphthalenol, 3-phenyl-	1-Piperazinepropanamide, N-(4-fl

2-Octynoic acid, methyl ester	Androstane-11,17-dione, 3-[(trime	1-Naphthalenol, decahydro-1,4a-d	1-Propanone, 1-(4-cycloocten-1-y
2-Pentanol decanoate	Anthranilic acid, 2TMS derivative	1-Octanol, 2-butyl-	1-Propene, 1,1'-oxybis-, (E,E)-
2-Pentyne-1,4-diol, 1-(2-furanyl)-	Bemegride	1-Octanol, 3-(2-methoxyethyl)-T	1-Propyl-1-cyclopentanol
2-Phenyl-6-nitrochroman-3-one, o	Benz[e]azulene-3,8-dione, 5-[(ace	1-Octyl trifluoroacetate	2-((2R,4aR,8aS)-4a-Methyl-8-met
2-Propenoic acid, 2-methyl-3-(4-n	Benzenamine, 5-fluoro-2-(4-fluor	1-O-Heptadecylglycerol, bis-trime	2-(1,1,3,3-Tetramethylbutyl)-1,4-b
2-Pyridinamine, N-(4,5-dihydro-5	benzoic acid, 2,4-dimethyl-3,5-din	1-Oxaspiro[2.2]pentane, 5-isoprop	2-(1,3-Dimethyl-2,6-dioxo-1,2,3,6
2-Tridecenoic acid, (E)-	Benzoic acid, 2-amino-, 4-methylc	1-Oxo-forskolin	2(1H)-Azocinone, 3,3-dichlorohex
2-Trimethylsiloxy-6-hexadecenoic	benzoic acid, 3-formyl-5-methyl-,	1-Pentene, 1,5-diphenyl-	2(1H)-Naphthalenone, 3,4,4a,5,8,
3-(2,2-Dimethyl-propyl)-6,6,8,8-te	benzoic acid, 4-[[(trimethylsilyl)o	1-Phenazinecarboxylic acid, 6-[1-	2(1H)-Naphthalenone, octahydro-
3,3,5,5,7,7,9,9,11,11,13,13-Dodec	Benzoic acid, 4-[2-(acetyloxy)-1-p	1-Phenyl-1-(trimethylsilyloxy)eth	2-(2,2-Bis-benzenesulfonyl-ethyl)
3,4-O-Benzylidene-.beta.-glucose	Bicyclo[2.2.1]heptane-1-carboxyli	1-propanone, 1,1',1''-benzene-1,3,	2-(2-Furyl)pyridine
3,5-Dimethylpiperazine-1-thiocarb	Bicyclo[2.2.1]heptane-7-carboxyli	1-Propanone, 1,3-diphenyl-3-(trim	2-(2-Hydroxy-cyclohexylamino)-p
3,5-Methano-2H-cyclopenta[b]fur	Bicyclo[3.3.0]octan-2-one, 7-neop	2-((2R,4aR,8aS)-4a-Methyl-8-met	2-(3-Hydroxy-prop-1-ynyl)-adama
3,6,9,12-Tetraoxatetradecan-1-ol,	Bicyclo[3.3.1]nonan-9-ol, 9-meth	2-(1,3-Dimethyl-2,6-dioxo-1,2,3,6	2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,
3,6-Dimethyl-4-prop-2-in-1-yl-2,6	Bromoacetic acid, 2-butyl ester	2-(3-Hydroxy-prop-1-ynyl)-adama	2,2,4,5,6-Pentachloro-6-methylcyc
3,7,11,15-tetramethylhexadecan-1	Carbonic acid, hexadecyl methyl e	2-(4-Benzyl-1,2,5-trimethylpiperi	2,2'-Bipyridine, 3,3'-dinitro-
3-[3-[1-Aziridinyl]propoxy]-2,5-d	Carbonic acid, nonyl 2,2,2-trichlo	2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,	2,2-Dimethoxybutane
3-Bromo-7-methoxy pyrazolo[4,3-	Chloroacetic acid 3-methylbutyl e	2,2-Dimethoxybutane	2,2-Diphenyl-N'-veratrylidene-1-c
3-Butoxy-1,1,1,5,5,5-hexamethyl-	Chloroacetic acid, 4-octyl ester	2,3:5,6-Di-O-1-Cyclohexylieden-	2,3,6,6-Tetramethyl-2,3,4,5,5a,6,7
3-Butyl-6-methyl-4-prop-2-en-1-y	Chloromethyl 3-chloro-octanoate	2,3-Dihydro-2-methyl-5-ethylfura	2,3-Dimethoxycinnamic acid, (E)-
3-Chloropropionic acid, 2-bromo-	Cholic acid, triacetate	2,3-Dihydroxypropyl icosanoate,	2,3-Dimethyl-3-heptene, (Z)-
3-Cyclohexene-1-propanoic acid,	Cyclobarbital	2,3-O-Benzal-d-mannosan	2',3'-Isopropylidene-5'-O-(N-p-tol
3-Cyclopentylpropionic acid, 2-pe	Cyclodecasiloxane, eicosamethyl-	2,4(1H,3H)-Pyrimidinedione, 1-[(	2,4(1H,3H)-Pyrimidinedione, 6-a
3-Ethoxy-1,1,1,5,5,5-hexamethyl-	Cycloheptene, 1-(1,1-dimethyleth	2,4(1H,3H)-Pyrimidinedione, 6-m	2,4,5-Trifluoro-3-methoxybenzoic
3-Ethyl-5-(4-nitro-1H-pyrazol-1-y	Cyclohexane, 1,1',1''-(1-ethanyl-2-	2,4,6-Cycloheptatrien-1-one, 3,5-	2,4,6-Cycloheptatrien-1-one, 3,5-
3-Ethylphenol, O-pentafluoroprop	Cyclohexane, 1,1-dimethoxy-	2,4,6-Cycloheptatrien-1-one, 3,5-b	2,4,7,9-Tetramethyl-5-decyn-4,7-d
3-Hydroxy-2-methyl-6-phthalimid	Cyclohexane, 1,1'-dodecylidenebi	2,4:5,6-Di-O-benzylidene d-gluco	2,4-Decadien-1-ol, (E,E)-
3-Isopropoxy-1,1,1,5,5,5-hexamet	Cyclohexane-1,3-dione, 2-allylam	2,4-Di-tert-butylthiophenol	2,5,9-Trimethyl-12-oxododeca-4,8
3-Methoxy-2,4,5-trifluorobenzoic	Cyclohexanecarboxamide, N-furfu	2,4-Dodecadienoic acid, 11-metho	2,5-Cyclooctadien-1-ol, acetate
3-Methyl-2,4,10-trioxatricyclo[3.3	Cyclohexanecarboxylic acid, 4-me	2,5-Cyclohexadiene-1,4-dione, 3-	2,5-Dihydroxybenzoic acid, 3TM
3-Phenyllactic acid, 2TMS derivat	Cyclohexanone, 2-(3-oxobutyl)-	2,5-Methano-1H-inden-7-ol, 8-chl	2,5-Dimethoxy-4-propoxy-.beta.-
3-pyridinamine, 2-[(4-methyl-4H-	Cyclohexanooxazin-2(1H)-one, 3,	2,5-Methano-1H-indene-7,8-diol,	2,5-exo,exo-protoadamanediol
3-Pyrrolidinecarbohydrazide, 5-ox	Cyclopentanecarboxylic acid, 3-m	2,5-Monoformal-l-rhamnitol	2,5-Hexanediol
4-(3-[(4-Fluorophenyl)methyl]-[1,	Cyclotetrasiloxane, octamethyl-	2,6,6-Trimethyl-bicyclo[3.1.1]hep	2,5-Methano-1H-inden-6(2H)-one
4-(5,5-Dimethyl-6-oxo-cyclohex-1	Cyclotrisiloxane, hexamethyl-	2,6-Dihydroxyacetophenone, 2TM	2,5-Octadiene, 3,4,5,6-tetramethyl
4,25-Secoobscurinervan-4-ol, 22-e	Dasycarpidan-1-methanol, acetate	2,6-Di-t-butyloctahydroazulene-3a	2,5-Piperazinediacetamide, N,N'-d
4,4,6a,6b,8a,11,12,14b-Octamethy	D-Glucitol, 1,5-anhydro-2,3,6-tri-	2,6-Lutidine 3,5-dichloro-4-dodec	2,6-Dioxoadamantane-1,3-dicarbo
4,6-Decadien-3-ol, 2-methyl-9-(2-	Dihydroartemisinin, 10-O-(t-butyl	2,6-Octadiene, 1-(1-ethoxyethoxy	2,6-Di-t-butyloctahydroazulene-3a
4,6-decadiynedioic acid, dimethyl	Di-n-decylsulfone	2,6-Pyridinedicarboxylic acid, dib	2,6-Lutidine 3,5-dichloro-4-dodec
4,6-di-tert-Butylresorcinol	Di-n-octyl phthalate	2,7-Dioxatricyclo[4.4.0.0(3,8)]dec	2,6-Octadienoic acid, 4-isopropyli
4[1H]-Pyridone, 3,5-dichloro-1,2,	d-Mannitol, 1-decylsulfonyl-	2-[(3,5-Diiodosalicylidene)hydraz	2-[1-Adamantylmethyl]aminothiaz
4-[N-Methylpiperazino]-5-nitro ve	d-Mannitol, 1-O-(22-hydroxydoco	2-[2-Hydroxy-3-[[2-(3-indolyl)-1,	2-[4-Cyclohexylbutanoylamino]-3
4-Acetoxy-7,8-dihydro(6H)furaza	d-Mannitol, 1-O-octyl-	2-[4-Cyclohexylbutanoylamino]-3	2-[5-(2-Isobutoxyphenyl)-4H-1,2,

4-Amino-5-(4-acetylphenylazo)be	E-2-Methyl-3-tetradecen-1-ol acet	2-[4-Oxiran-2-ylmethoxy)phenoxy	2-Adamantan-1-yl-5-methyl-2H-te
4-Chlorobutyric acid, pentadecyl e	E-3-Methyl-2-hexenoic acid	2-[5-(2-Methoxy-ethyl)-7-(6-meth	2-Butanol, 3-methyl-, acetate
4-Fluoro-3-trifluoromethylbenzoic	Ethanethioic acid, S-[8-(diethylph	26,27-Dinorergosta-5,23-dien-3-o	2-Butanone, (2,4-dinitrophenyl)hy
4H-1-benzopyran, 4,4'-oxybis[2-p	Ethanol, 1-(1-cyclohexenyl)-	2-Adamantylamine, N-acetyl-	2-Butenedioic acid (E)-, bis(2-eth
4H-Cyclopropa[5',6']benz[1',2':7,8	Ethyl 1-thio-.alpha.-d-arabinofura	2-Azaspiro[4.5]deca-6,9-dien-8-o	2-Butenoic acid, 4-bromo-3-methy
4-Heneicosanone, 1-cyclopentyl-	Ethyl homovanillate, TMS derivat	2-Aziridinone, 1-tert-butyl-3-(1-m	2-Butyl-2,7-octadien-1-ol
4-Hexenal, 6-hydroxy-4-methyl-,	Ethyl iso-allocholate	2-Bromo-4,5-dimethoxycinnamic	2-Butynedioic acid, di-2-propenyl
4-Hydroxy-6-[2,2,2-trifluoroethox	Ethylbenzene	2-Bromo-5-nitrothiophene	2-Chloro-4,6-dimethyl-5-nitro-nic
4-Methoxy-2,3-dimethyl-2,3-dihy	Ginsenol	2-Bromotetradecanoic acid	2-Chloro-5-methylphenol, TBDM
4-Methoxyphenoxyformamide, N-	Glutaric acid, 2,2-dichloroethyl 3-	2-Butanol, 2-methyl-, acetate	2-Cyclohexen-1-one, 3-(3-hydrox
4-n-Butylthiane	Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,	2-Buten-1-ol, 3-methyl-, benzoate	2-Cyclohexen-1-one, 3-(hydroxym
4-n-Butylthiane, S,S-dioxide	Hexane, 2,3,4-trimethyl-	2-Butene, 1,4-diethoxy-	2-Ethyl-1-hexanol
4-Nitro-5,6,7,8-tetrahydronaphtha	Hexanoic acid, 3-(2,2,3,3-tetramet	2-Chloro-9-oxabicyclo[3.3.1]nona	2'-Ethyl-3-[(3-phenylpropionyl)hy
4-Penten-2-ol, trifluoroacetate	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,	2-Cyclohexen-3,5-diol-1-one, 2-[1	2-Fluoro-5-trifluoromethylbenzoic
4-Sulfamoyl-thiophene-2-carboxy	Histamine, N-BOC-5-iodo-	2-Cyclohexen-3-ol-1-one, 2-[11-p	2H-1,4-Benzothiazin-2-acetic acid
4-tert-Amylphenol, TMS derivativ	i-Propyl 9-tetradecenoate	2'-Deoxyinosine, tris(trimethylsily	2H-1-Benzopyran-2-one, 3-acetyl-
4-tert-Butylphenol, TMS derivativ	L-Alanine, N-[(2,4-dichloropheno	2-Dodecyloxyethanol acetate (este	2H-1-Benzoxecin-2,7(8H)-dione,
5-(Furan-2-carbonyl)-4-phenyl-5,6	Methanesulfonic acid, 1-t-butylaz	2-Ethoxyethyl hydrogen phthalate	2H-3,9a-Methano-1-benzoxepin, o
5-Acetamido-4,7-dioxo-4,7-dihyd	Methanol, tris(methylenecyclopro	2-Fluoro-5-trifluoromethylbenzoic	2H-Azepin-2-one, 1,5,6,7-tetrahyd
5-Bromopentanoic acid, 1-(cyclop	Methoprene	2-Furanoctanoic acid, 5-hexyltetra	2H-Azepin-2-one, 5-(1,1-dimethyl
5-Bromovaleric acid, nonyl ester	Methyl (1R,2R,8aS)-2-(methoxyc	2H-3,9a-Methano-1-benzoxepin, o	2-Hexadecenoic acid, 2,3-dimethy
5H-Cyclopropa[3,4]benz[1,2-e]az	Methyl 16-acetoxyheptadecanoate	2-Heptenal, (E)-	2-Hexenal, 2-methyl-
5-Hexenoic acid, 6-[p-chlorophen	Methyl 2,3,4,6-tetra-O-acetyl-.bet	2-Heptene, 5-methyl-	2H-Pyran-5-carboxamide, 2-oxo-N
5-Isobenzofurancarboxylic acid, 1	Methyl 2-bromo-hexadecanoate	2-Hexadecenoic acid, 2,3-dimethy	2-Hydroxy-1,1,10-trimethyl-6,9-e
5-Methyl-2-N-methylaminobenzo	Methyl 4-methoxymandelate, TMS	2-Hexadecenoic acid, methyl ester	2-Hydroxy-2,3-dimethylsuccinic a
5-Methylsalicylic acid, 2TMS der	Methyl Z-11-tetradecenoate	2H-Furo[3,2-b]pyran-2-one, hexah	2-Hydroxy-6-methyl-3-cyclohexen
5-Nitro-4-oxo-4,5,6,7-tetrahydrob	Methylene-(3-trimethylsilylphenyl	2H-Pyrrol-2-one, 5-ethoxy-3,4-dih	2-Hydroxymethyl-2,6,8,8-tetramet
5-Phospha-1,4,6,9-tetraoxaspiro[4	N,N-Dimethyl-4-nitroso-3-(trimet	2H-Tetrazole, 5-(thiophen-2-yl)-	2-Hydroxy-N'-(1-(2-thienyl)ethyli
6.beta.-Hydroxymethandienone, 2	n-Hexane	2-Hydroxychalcone	2'-Hydroxypropiophenone, TMS d
6a,14a-Methanopicene, perhydro-	N-Nitro-N',N'-tetramethyleneguan	2-Methyl-3-[(1S,2S)-1,3,3-trimeth	2-Iodohiistidine
6-Amino-2-(3-methylpiperidin-1-y	n-Propyl 9-octadecenoate	2-Methylbutyl isothiocyanate	2-Isopropenyl-4,4,7a-trimethyl-2,4
6-Chloro-4-(7-methoxy-1-benzofu	n-Propyl heptyl ether	2-Methylenecyclohexanol	2-Isopropyl-octahydrobenzo[e][1,
6-Chlorohexanoic acid, TMS deri	Octadecane, 1,1'-[1,3-propanediyl	2-Methylpropyl 4-[(trimethylsilyl)	2-Methylthiomethyl-6-(5-methylth
6-Dimethyl(chloromethyl)silyloxy	Octadecane-1,2-diol, 2TMS deriva	2-Myristynoyl-glycinamide	2-Myristynoyl-glycinamide
6-Dimethylsilyloxytetradecane	Octanedioic acid, dimethyl ester	2-Nitro-N-(4-p-tolyl-thiazol-2-yl)-	2-Nitrophenol, 3-methylbutyl ethe
6-Hydroxy-1-oxogermacr-4,10(15	Octanoic acid, 3-phenyl-2-propen	2-Nonadecanone 2,4-dinitropheny	2-Nonanol, 5-ethyl-
6-Methoxy-2-phenyl-hexahydropy	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1	2-Nonen-1-ol, (Z)-	2-Nonenoic acid
6-Methyl-4-phenyl-2,4,5,7-tetrahy	Oxirane, [(hexyloxy)methyl]-	2-Octenal, (E)-	2-Oleoylglycerol, 2TMS derivativ
6-O-Acetylglucose	o-Xylene	2-Octenoic acid	2-Pentanol, acetate
7-Chloro-2-phenyl-4[3H]-quinazo	Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-	2-Oxa-7-thiatricyclo[4.4.0.0(3,8)]	2-Pentene, 2,3,4-trimethyl-
7H-6,9a-Methano-4H-cyclopenta[	Pentasiloxane, dodecamethyl-	2-Oxazolamine, 4,5-dihydro-5-(ph	2-Pentene, 2,4,4-trimethyl-
7-Hydroxy-3-(1,1-dimethylprop-2	Phenylacetic acid, 4-(cyclohexane	2-Oxo-5-(4-nitrophenoxy)-4,6-dip	2-Pentene, 2-methyl-5-nitro-
7-Octenoic acid, methyl ester	Phytyl palmitate	2-Pentanol, acetate	2-Pentyne-1,4-diol, 1-(2-furanyl)-

7-Oxabicyclo[4.1.0]hept-3-ene-3-	Pregnan-20-one, 3,11,21-tris[(trim	2-Pentene, 3-(chloroethylboryl)-2-	2-Propanone, 1-cyclopentyl-
8,11,14-Eicosatrienoic acid, (Z,Z,	Propanamide, N-(4-methoxypheny	2-Pentyne-1,4-diol, 1-(2-furanyl)-	2-Propen-1-one, 1-(4-methoxyphe
8,11,14-Eicosatrienoic acid, meth	Propane, 1-(2,2-dichloro-1,3,3-tri	2-Propenoic acid, 2-methyl-3-(1-p	2-Propen-1-one, 1,3-diphenyl-, (E
8,12-Octadecadienoic acid, pyrrol	Purine-2,6-dione, 8-(3-ethoxyprop	2-Pyrrolidinone, 1-[4-(1-pyrrolidi	2-propenoyl chloride, 3,3'-(1,4-ph
8-Methyl-9,11-tridecadienol propi	Pyridine, 1,2,3,6-tetrahydro-1-met	2-Trimethylsiloxy-6-hexadecenoic	2-Pyrrolidinone, 1-[4-(1-pyrrolidi
9,9-Dimethyl-7-phenyl-1,3,8-triaz	Pyridine, 1-acetyl-1,2,3,4-tetrahyd	2-Triobarbituric acid, 5-allyl-5-eth	2-Tridecyl-5-(acetylamino)tetrahy
9-Borabicyclo[3.3.1]nonane, 9-me	Pyrrolidine-2,5-dione, 1-(4-oxo-6,	2-Undecanone 2,4-dinitrophenylh	2-Trimethylsiloxy-6-hexadecenoic
9H-Purine-9-propanoic acid, 6-hy	Sebacic acid, 2,2-dichloroethyl he	3-([4-(4-Fluorophenyl)-5-methyl-2	3-(1,3-Dihydroxyisopropyl)-1,5,8,
9-Octadecenoic acid (Z)-, methyl	Sebacic acid, di(2,2-dichloroethyl	3-(1,1,2,2-Tetrafluoroethoxy)prop	3-(2-Methoxyethyl)-1-nonanol, T
9-Oxabicyclo[6.1.0]nonan-4-ol	Silane, chlorodiethylheptyloxy-	3-(1,3-Dihydroxyisopropyl)-1,5,8,	3-(4-Bromophenyl)-7-hydroxy-4-
Acetamide, N-(4,8-dioxotricyclo[3	Silicic acid, diethyl bis(trimethyls	3-(1-Ethyl-1-methyl-4-piperidin-1	3-(Aminomethyl)adamantane-1-ca
Acetamide, N-(6-acetylaminobenz	Stearic acid, TMS derivative	3-(2,3-Dihydro-1,4-benzodioxin-2	3,16-Dihydroxyandrost-5-en-17-o
Acetamide, N-2-norbornen-7-yl-, s	Succinic acid, 2-fluorophenyl 3-m	3-(2-Benzyl-benzoimidazol-1-yl)-	3,3,3-Trifluoroprop-1-en-1-yl fluo
Acetamide, N-cyclohexyl-2,2,2-tri	Succinic acid, 2-methylpent-3-yl 2	3,4-Dihydro-2-methyl-2-phenyl-2	3,3,5,5,7,7,9,9,11,11,13,13-Dodec
Acetic acid, chloro-, decyl ester	Succinic acid, 4-bromo-2,6-difluo	3,4-Dimethylbenzoic acid TBDM	3,3,5,5-Tetrabutoxy-1,1,1,7,7,7-he
Acetonitrile, 2-[1-(4-fluorophenyl	Succinic acid, hept-2-yl dodec-9-y	3,5-Ethanoquinolin-10-one, decah	3,3-Diethylpentadecane
Acetophenone 4-[1-Methyl-4-diet	Tartronic acid, 4-(dimethylethylsil	3,6-methanonaphth[2,3-b]oxirene-	3,4-Dimethylbenzoic acid, TBDM
Adenosine, N(6)-[3-bromobenzyl]	Tetrasiloxane, 1,1,3,3,5,5,7,7-octa	3,7,11,15-tetramethylhexadecan-1	3,5,9-Trioxa-4-phosphaheptacosan
Ambreinolide(cis-A/B)	Thiophene, 2-(2,2-dimethylpropyl	3,7-Bis(3-fluorophenyl)-4H,6H,7	3,5-Methano-2H-cyclopenta[b]fur
Amino(bicyclo[6.1.0]non-4-en-9-y	Thiophene-2-carboxylic acid, 4-br	3,7-Dimethyloctyl acetate	3,6,9,12-Tetraazatetradecane-1,14
Androst-5-ene, 17.beta.-ol, 3.beta.	Thymol, TBDMS derivative	3.beta.-Hydroxyguaia-4(15),10(14	3,6-methanonaphth[2,3-b]oxirene-
Androstan-4-one, (5.alpha.)-	Thymol, TMS derivative	30-Norlupan-28-oic acid, 3-hydro	3,6-Octadien-1-ol, 3,7-dimethyl-,
Aspidofractinine-1-carboxaldehyd	trans-2-Ethyl-2-hexen-1-ol	3-Benzo[1,3]dioxol-5-yl-3-(2-tert-	3,6-Undecandione
Benz[e]azulene-3,8-dione, 3a,4,6a	Trichloroacetic acid, undecyl ester	3-Bromo-pyrido[2,1-b]quinazolin	3,8-Dioxabicyclo[5.1.1]nonane, 6
Benz[e]azulene-3,8-dione, 5-[(ace	Trimethylsilyl 3-methyl-4-[(trimet	3-Buten-2-amine, 4-(2,6,6-trimeth	3.beta.-Hydroxyguaia-4(15),10(14
Benzene, [(2-methoxyethenyl)sulf	Trimethylsilyl-di(timethylsiloxy)-s	3-Buten-2-one, 4-(3-hydroxy-6,6-	3-Bromo-2-prop-1-ynyltetrahydro
Benzene, 1-(1,1-dimethylethyl)-4-	Tris(tert-butyldimethylsilyloxy)ars	3-Butyl-6-methyl-4-prop-2-en-1-y	3-Carbazolyl methyl ketone thiose
Benzhydrazide, N2-(3,7-dimethyl-	Trisiloxane, 1,1,1,5,5,5-hexameth	3-Carbazolyl methyl ketone thiose	3-Chlorophenethyl alcohol, 3-met
Benzo[b]thiophen-3(2H)-one, 2-d	Trisiloxane, 1,1,3,3,5,5-hexameth	3-Carbomethoxytricyclo[4.3.1.0(3	3-Chloropropionic acid, heptadec
Benzo[h]quinoline, 2,4-dimethyl-	Trispiro[4.2.4.2.4.2.]heneicosane	3-Chloro-5-cholestene	3-Chloropropionic acid, heptyl est
Benzoic acid, 2,4,6-trichloro-, eth	Undecanoic acid, 10-bromo-	3-Chloropropanoic acid 2-methylp	3-Chlropropionic acid, nonyl este
Benzothiazole, 2-(5-chloromethyl	Z-2-Tetradecen-1-ol acetate	3-Chloropropionic acid, 2-pentade	3-Cyclopentylpropionic acid, but-
bicyclo[2.2.1]hept-5-ene-2-carbox		3-Chlropropionic acid, nonyl este	3-Cyclopropyl-6-[(3,5-difluoroph
Bicyclo[2.2.1]heptan-2-ol, 7-cyclo		3-cis-Methoxy-5-trans-methyl-1R	3-Deoxyglucose
Bicyclo[4.1.0]heptan-3-ol, 3,7,7-t		3-Cyclohexene-1,1-dimethanol	3-Ethoxy-1,1,1,5,5,5-hexamethyl-
Bicyclo[6.1.0]nonane-9,9-dicarbo		3-Cyclopentene-1,2-diol, cis-	3-Ethylheptanoic acid
Bromchlorenone		3-Cyclopentene-1-propanoic acid,	3-Formoxy-12-ketocholanic acid,
Butane, 1-(2,2-dichloro-3-ethylcy		3-Deoxy-d-mannoic lactone	3-Heptafluorobutyriloxy-3,5,10-pr
Butyric acid, 4-phenyl-, oct-3-en-2		3-Ethoxy-1,1,1,5,5,5-hexamethyl-	3-Heptyne
Carbamic acid, 2-cyclopenten-1-yl		3-Formyl-4,5-dimethoxycarbonyl-	3-Hexen-2-one, 3-cyclohexyl-4-et
Carbonic acid, allyl cyclohexyl es		3H-1,4-Benzodiazepine, 3-morpho	3-Hexenoic acid, 3-methyl-, methy
Carbonic acid, ethyl heptyl ester		3-Heptanol, 2-methyl-5-nitro-(R	3-Hydroxy-12-ketobisnorcholanic
Carbonic acid, ethyl undec-10-eny		3-Hexene, 2,2,5,5-tetramethyl-(Z	3-Hydroxy-7,8-dihydro-.beta.-ion

Carbromal		3H-Pyrazole, 4,5-dihydro-3-(2,2,3	3-Hydroxybenzoic acid, 2TMS de
Chiloscyphone		3-Hydroxybenzoic acid, 2TMS de	3-Methoxy-5-methyl-4-nitrophtha
Chloroacetic acid, heptyl ester		3-Isopropoxy-1,1,1,5,5,5-hexamet	3-Methyl-1-(5-oxohexyl)-7-propy
Chloromethyl 10-chlorodecanoate		3-Isoxazolecarboxylic acid, 5-(chl	3-Methyl-1-[(1-phenylethyl)carba
Chloromethyl 2-chlorooctanoate		3-Methoxy-2,4,5-trifluorobenzoic	3-Methyl-2-(3-methylpentyl)-3-bu
Chloromethyl 3-chlorononanoate		3-Methyl-2-[4-(3-methyl-butoxy)-	3-Methyl-2-[1,6-dihydro-6-oxopu
Chloromethyl 4-chlorodecanoate		3-Methyl-4-nitro-5-(1-pyrazolyl)p	3-Methyl-8-morpholin-4-yl-7-(2-p
Chloromethyl 6-chlorononanoate		3-Methylcatechol, bis(trifluoroace	3-Nonenoic acid, ethyl ester
Cholest-5-ene-16,22-dione, 3.beta		3-n-Heptyl-7-methyl-9-(2,6,6-trim	3-Octanol, 1-bromo-1,1,2,2-tetrafl
Chromium, cyclopentadienyl-(.eta		3-Propylglutaric acid monomethy	3-Octanone
cis-11,14-Eicosadienoic acid, met		3-Pyrrolidinecarbohydrazide, 5-ox	3-Phenyl-2-ethoxypropylphthalim
cis-2-(2-Hydroxyethyl)cyclohexan		3-Undecanol, 2,3-dimethyl-	3-Propylglutaric acid
cis-2,3-Epoxyoctane		4-(2-Methoxyphenyl)piperidine	3-trsns-(1,1-dimethylethyl)-4-tran
cis-9-Tetradecenoic acid, heptyl es		4-(4-Bromobutyl)-2,2,6-trimethyl[	4-(Dipropylphosphoryl)-4-methyl
Cyclobarbital		4-(4-Methoxy-a-methylbenzyliden	4,4,6a,6b,8a,11,12,14b-Octamethy
Cyclodecanone, oxime		4,4-Bis(dichlorofluoromethyl)-1,2	4,4-Bis(dichlorofluoromethyl)-1,2
Cyclodecasiloxane, eicosamethyl-		4,5-Dichloro-2-nitrobenzoic acid	4,6,10,10-Tetramethyl-5-oxatricyc
Cyclodecene, 1,2-dimethyl-, (Z)-		4,5-Dichlorotricyclo[5.3.1.1(2,6)]	4,6-Dimethyl-2-[(1,2-oxazol-3-yl
Cycloheptasiloxane, tetradecamet		4,5-Dimethoxy-1-naphthyl dimeth	4,6-di-tert-Butylresorcinol
Cyclohexane, 1,2,4-triethenyl-		4,6-Dimethyl-2-[(1,2-oxazol-3-yl	4,8-Decadienal, 5,9-dimethyl-
Cyclohexane, isocyanato-		4,6-Dioxa-3,8-disiladecane, 5-(2,6	4,8-Methanoazulen-9-ol, decahyd
Cyclohexane-1,3-dione, 2-allylam		4,6-di-tert-Butylresorcinol	4-[3-(2H-1,3-Benzodioxol-5-yl)-1
Cyclohexanecarboxylic acid, 2-me		4,8-Methanoazulen-9-ol, decahyd	4-ACETYLAMINO-(1,2:3,4)BIS(
Cyclohexanol, 2-cyano-5-[1-meth		4-[2-(4-Fluorophenyl)ethyl]piperi	4-Amino-7-[2,3-dihydroxypropyl]
Cyclohexanone, (2-nitrophenyl)hy		4-[4-Pyridyl]-3-thiosemicarbazone	4-Bromo-2,6-difluorobenzyl alcoh
Cyclohexanone, 4-methoxy-		4-[5-(4-Fluoro-phenyl)-tetrazol-2-	4-Bromopentanoic acid, methyl es
Cyclohexene, 4-(4-ethoxycyclohe		4-[6-(4-Amino-1,2,5-oxadiazol-3-	4-Butyl-5-(1-methylethenyl)-6-(3-
Cyclopentanecarboxylic acid, 3-m		4a,7,7,10a-Tetramethyldodecahydr	4-Chloro-4'-[2,4-diamino-6-ethyl-
Cyclopropane, 1,1-dibromo-2-hex		4'-Acetoxymethaqualone	4-Chlorotricyclo[4.4.0.0(2,8)]dec-
Cyclopropane, 1-methylene-2-(4,4		4-Acetyloxyimino-6,6-dimethyl-3-	4-Dimethylamino-3,5-dinitrobenz
Cyclopropanecarboxamide, 2,2-di		4-Dimethyl(phenyl)silyloxypentad	4-Dodecanol
Cyclopropaneoctanoic acid, 2-[(2-		4-Ethylbenzoic acid, 1-(cyclopent	4H-1-benzopyran, 2-phenyl-
Cyclotetrasiloxane, octamethyl-		4H-1,2,4-triazole-3,5-diamine, N3	4H-1-benzopyran, 4,4'-oxybis[2-p
Cyclotrisiloxane, hexamethyl-		4-Heptadecyne, 1-chloro-	4H-Cyclopenta[3,4]cyclobuta[1,2-
Cycloundecanone, oxime		4-Hexenoic acid, 6-(acetyloxy)-4-	4-Heptadecyne, 1-chloro-
Cycloundecene, 1-methyl-		4-Methoxycarbonylmethylundec-3	4-Hexen-2-one, O-methyloxime
Dasycarpidan-1-methanol, acetate		4-Methyl-1,4-diazacycloheptane-1	4-Hexyl-1-(7-methoxycarbonylhep
Decyl .alpha.-d-glucoside, 3-acety		4-Methyl-5-penta-1,3-dienyltetrah	4-Hydrazono-5-hydroxyimino-4,5,
d-Glucitol, 1-thio-nonyl-		4-Methyl-bicyclo[3.2.1]octan-2-o	4-Hydroxy-5,5-dimethyl-3-phenyl
Dichloroacetic acid, nonyl ester		4-Pentamethylenethiosemicarbazi	4-Hydroxy-5-hydroxyimino-4-(2-i
Dimethyl bicyclo[2.2.1]-2,5-hepta		4-Piperidineacetic acid, 1-acetyl-5	4-Hydroxybenzeneacetic acid, 2T
Dimethylmalonic acid, 2-isopropo		4-Quinolinol,4-ethenyl-1-ethyldec	4-Hydroxymethylbenzamide
Dimethylmalonic acid, dodecyl 2,		4-Sulfamoyl-thiophene-2-carboxy	4-Isopropenyl-4,7-dimethyl-1-oxa

Di-n-octyl phthalate		4-tert-Butylphenol, TMS derivativ	4-Isopropyl-5-methylhexa-2,4-die
Disiloxane, 1,1,3,3-tetramethyl-1,		5-(4,5-Dihydro-3H-pyrrol-2-ylmet	4-Methoxy-6-methyl-5-nitroisobe
DISTEARIN		5,5-Dimethyl-3-(3-methyl-oxiran-	4-Methylpiperidine-1-thiocarboxy
d-Mannitol, 1,1'-O-1,16-hexadeca		5,5-Dimethyl-cyclohex-3-en-1-ol	4-Octenoic acid, ethyl ether
d-Mannitol, 1-decylsulfonyl-		5,6,7-Trimethoxy-1-indanone	4-Pentenoic acid, 3-methyl-2-(phe
d-Mannitol, 1-O-(22-hydroxydoco		5,6-Dichloro-2-methyl-4,7-dihydr	4-Piperidineacetic acid, 1-acetyl-5
Dodecane, 1,12-dibromo-		5.alpha.-Androstan-3.alpha.-ol-17	4-Pregnen-21-ol-3,20-dione gluco
Dodecane, 1,2-dibromo-		5-Acetamido-4,7-dioxo-4,7-dihyd	4-Pyridinamine, N-cyclohexyl-3-n
E-2-Methyl-3-tetradecen-1-ol acet		5-Amino-2-ethyl-2,3-dihydro-2,4-	4-Pyridinol-3,5-dichloro-2,6-dime
Ethanol, 2-(1-methylethoxy)-		5-Amino-2-selenoxo-2H-[1,3]dith	4-Sulfamoyl-thiophene-2-carboxy
Ethanone, 1-(4-biphenyl)-2-(1,4-d		5-Bromopentanoic acid, 2-ethylhe	4-tert-Amylphenol, TMS derivativ
Ethanone, 1-[2,3-dihydro-6-hydro		5-Chloro-1-[.beta.-d-ribofuranosy	4-tert-Butylphenol, TMS derivativ
Ethisterone, O-methyloxime		5-Chloro-2-methyl-3(2H)-isothiaz	4-Tetradecanol
Ethyl 1-(2-formylethyl)-2-oxocylo		5-Fluoro-3-trifluoromethylbenzoic	5-([(3-Methoxyphenyl)amino]met
Ethyl 1-thio-.alpha.-d-arabinofura		5H-Benzo[b]pyran-8-ol, 2,3,5,5,8	5-(2-Iodoanilino)-6-(1-pyrrolidiny
Ethyl homovanillate, TMS derivat		5H-Cyclohepta-1,4-dioxin, 2,3,4a,	5-(3,3-Dimethyl-5-oxo-pyrrolidin-
Ethyl homovanillate, TMS derivati		5-Hexenoic acid, 6-[p-chlorophen	5-(3-Chlorophenyl)-3-imino-1-me
Ethyl iso-allocholate		5-Hexyne, 1-bromo-	5-(7a-Isopropenyl-4,5-dimethyl-oc
Fumaric acid, 3-pentyl tetradecyl e		5H-Thiazolo[2, 3-a]pyridine-8-car	5,12-Naphthacenedione, 7,8,9,10-
Fumaric acid, dec-4-enyl tridecyl e		5-Hydroxy-5-phenyl-1-aza-bicyclo	5,6,6-Trimethyl-5-(3-oxobut-1-en
Fumaric acid, dodecyl 2-formylph		5-Isoxazolol, 3-(2-furanyl)-4,5-dih	5,6-Azulenedimethanol, 1,2,3,3a,8
Fumaric acid, dodecyl 2-octyl este		5'-Methyl-[2,2']bithiophenyl-5-car	5,8-Dimethoxy-1,4-dimethyl-1,4-d
Fumaric acid, heptyl tetradec-3-en		5-Methyl-1-hexyn-3-ol	5.alpha.-Cardanolide, 2.alpha.,3.b
Furan-2(5H)-one, 4-(4-methyl-1-p		5-Methyl-2-aminobenzophenone s	5.alpha.-Cholestan-6.beta.-amine,
Furazan-3-carbohydrazide, 4-amin		5-Methylisatin, TMS derivative	5.beta.-Pregnane-3.alpha.,17,20.al
Furo[2',3':4,5]thiazolo[3,2-g]purin		5-Nonadecen-1-ol	5-[p-Chlorocinnamylidene]rhodan
Ginsenol		5-Thiatricyclo[4.1.0.0(2,4)]heptan	5-Acetyl-2-methylpyridine thiose
Glutaric acid, monochloride, but-3		6-(2-propynyloxy)-1-hexanol	5-Amino-6-piperidinofurazano[3,4
Gorgost-5-en-3-ol, (3.beta.)-, TMS		6,15-Dibutyl-2,3,11,12-dibenzo-1	5-Benzofuranacetic acid, 6-etheny
Heptadecanenitrile		6.alpha.-[(2-Hydroxyethyl)thio]ch	5-Benzyloxy-3,8,9-trioxa-tricyclo
Hexadecanoic acid, methyl ester		6.beta.,6.beta.-Dibromo-6,7-methy	5-Bromo-3-methyl-1H-indole-2-ca
Hexanedioic acid, 3-methyl-, dime		6-Amino-1-.beta.-d-ribofuranosyli	5-Chloropentanoic acid, 2,2-dimet
Hexanoic acid, 2,7-dimethyloct-7-		6-Amino-4,7-dimethoxy-2H-1,3-b	5-Ethoxy-cyclooctene
Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,		6-Azacholest-4-en-7-one, 6-benzy	5H-Inden-5-one, octahydro-7a-me
Imidazole, 5-bromo-4-nitro-1-[2,4		6-Azidotetrazolo(b)pyridazine	5-Isoxazolol, 3-(2-furanyl)-4,5-dih
Imidazole-5-carboxamide, 1-butyl		6-Chloro-1-ethyl-4-oxoquinoline-	5-Methyl-1-hexyn-3-ol
i-Propyl 10-methyl-dodecanoate		6-Chloro-4-(7-ethoxy-1-benzofura	5-Methyl-2-N-methylaminobenzo
i-Propyl 9,12,15-octadecatrienoate		6-Chlorohexanoic acid, TMS deri	5-Methylsalicylic acid, 2TMS der
Isobutyric acid, undec-10-enyl est		6-Ethyl-3-(1-methylethyl)tetrahyd	5-Oxa-6-azaspiro[3.4]oct-6-ene
Isolongifolan-8-ol		6-Methoxypurine, TBDMS deriva	5-Oxo-6-phenylhexanoic acid
l-Gala-l-ido-octose		6-Methyl-3-nitro-4-trifluoromethy	5-Tert-butyl-1,3-oxathiane
Longipinocarveol, trans-		6-Octadecenoic acid, (Z)-	6,7-Dibromo-Z-11-tetradecene-1-o
L-Valine, N-[2-(chloroimino)-3-m		6-Octadecenoic acid, methyl ester	6.beta.-Hydroxymethandienone, 2

Methanesulfonic acid, 17-cyano-1		7-(4-Chlorophenyl)-1,6-diazabicy	6-Amino-1-.beta.-d-ribofuranosyli
Methanesulfonic acid, 9-oxabicyc		7,7,9,9,11,11-Hexamethyl-3,6,8,1	6-Amino-4,7-Dimethoxy-2H-1,3-b
Methanol, tris(methylenecyclopro		7,8-Dibromo-4,4,7-trimethyl-hexa	6-Bromohexanoic acid, 2-butyl es
Methanone, (3-fluorophenyl)[4-(2		7.alpha.-Formyl-8.alpha.-methoxy	6-Cyanomethoxy-N-methoxymeth
Methoprene		7-Chloroquinoline-2,4-dicarboxyl	6-Ethyl-5-[4-morpholinyl]-2,4(1H
Methyl 1-(tert-butyl-phenyl-phosp		7-Hexadecenal, (Z)-	6H-Furo[2',3':4,5]oxazolo[3,2-a]p
Methyl 16-acetoxyheptadecanoate		7-Hydroxy-6,9a-dimethyl-3-methy	7,7,9,9,11,11-Hexamethyl-3,6,8,1
Methyl 8-heptadecenoate		7-Hydroxy-6-methyl-oct-3-enoic a	7,8-Dioxabicyclo[3.2.1]oct-2-ene
Methyl myristoleate		7-Hydroxy-bicyclo[3.3.1]non-2-en	7-Chloro-4-methoxy-3-methylquin
Methyl stearate		7-Octenoic acid	7-Exo-ethyl-5-methyl-6,8-dioxabi
Morphinan-3,14-diol, 4,5-epoxy-,		8,11-Octadecadiynoic acid, methy	7-Heptadecene, 7-methyl-, (E)-
N-(1,1-Dimethylpropynyl)acrylam		8-Methyl-6-nonenoic acid	7-Hexadecenal, (Z)-
N-(2-Fluorophenyl)-5,6-dihydro-4		8-Tetradecen-1-ol acetate	7-Hydroxy-3-(1,1-dimethylprop-2
N(5)-[[3,4-Dichlorophenyl]methyl		9,10-Secocholesta-5,7,10(19)-trie	7-Octadecenoic acid, methyl ester
N,N-Dinitro-1,3,5,7-tetrazabicycl		9,12-Octadecadienoic acid (Z,Z)-	7-Octynoic acid, methyl ester
N-{[5-(2-Chlorophenyl)furan-2-yl		9,12-Octadecadienoic acid, (2-phe	7-Oxatetracyclo[7.3.0.0(2,6).0(4,9
N-Acetylmannosamine		9,12-Octadecadiynoic acid, trimet	8,11,14-Eicosatrienoic acid, (Z,Z,
Naphth[1,2-b]oxirene, decahydro-		9,19-Cyclolanostan-3-ol, 24,24-ep	8,11,14-Eicosatrienoic acid, meth
Naphthalene, 1-(1-cyclohexen-1-y		9.alpha.-Fluoro-11.beta.,17.beta.-	8,11-Octadecadiynoic acid, methy
Neointermedeol		9-Borabicyclo[3.3.1]nonane, 9-(1-	8-Azabicyclo[3.2.1]octane-2-carb
n-Hexane		9-Borabicyclo[3.3.1]nonane, 9-(2-	8-Bromooctanoic acid, ethyl ester
Nicotinic acid (7-methoxy-2-oxo-		9-Borabicyclo[3.3.1]nonane, 9-(2,	8-Dodecenoic acid, 11-hydroxy-,
N-Methyladrenaline, 3TMS deriva		9-Bromononaldehyde	8-Methyl-6-nonenoic acid
Octadecahydro-benzo[cd]pyrene		9-Methylcorticosterone	8-Morpholino-4-cycloocten-1-one
Octadecane, 1,1'-[1,3-propanediyl		9-Octadecene, 1-[3-(octadecyloxy	8-Nonynoic acid
Octadecane-1,2-diol, 2TMS deriva		9-Octadecenoic acid, (2-phenyl-1,	9-Borabicyclo[3.3.1]nonane, 9-(2,
Octadecanoic acid		9-Oxabicyclo[6.1.0]nonan-4-ol	9-Borabicyclo[3.3.1]nonane, 9-[3-
Octadecanoic acid, 16-oxo-, meth		9-Oximino-3,6-dichloro-2,7-bis-(2	9-Octadecenoic acid, methyl ester,
Octadecanoic acid, 18-methoxy-,		9-Tetradecenoic acid, (E)-, TMS d	Acetamide, 2-chloro-N,N-di-2-pro
Octadecanoic acid, 2-(hexadecylo		9-Undecen-2-one, 6,10-dimethyl-	Acetamide, 2-cyano-N-[(ethylamin
Octadecanoic acid, 2,3-dihydroxy		Acetamide, 2-chloro-N-[(5-chloro-	Acetamide, N-(2-ethylhexyl)-2-ph
Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1		Acetamide, N-(6-acetylaminobenz	Acetamide, N-[2-(3-ethyl-1-methy
Oxacyclopentadecan-2-one		Acetamide, N-[4-(4-methoxypheny	Acetamide, N-[2-(acetyloxy)-2-[4-
Oxamide, N-cyclopropyl-N'-(2-eth		Acetamide, N-methyl-N-[4-(3-hyd	Acetamide, N-[3-(ethylamino)-4-m
Oxirane, decyl-		Acetate, 4-(acetyloxy)-2-[(2,5,5,8a	Acetamide, N-5.alpha.-androst-2-e
Pacifigorgiol		Acetic acid, 2-[4-(4-chlorophenyl)	Acetamide, N-methyl-N-[4-(3-hyd
Pentafluoropropionic acid, dodecy		Acetic acid, 4-(7-methylydenebicy	Acetate, 2-(4-hydroxybutyl)cycloh
Pentanal, (2,4-dinitrophenyl)hydra		Acetic acid, butyl ester	Acetic acid, (((4-methoxyphenyl)s
Pentanamide, N-1H-purin-6-yl-		Acetic acid, trifluoro-[2,3,3a,9a-t	Acetic acid, 10-chlorodecyl ester
Pentanoic acid, 3-mercaptohexyl e		Acetic acid, trifluoro-, 2-methoxyp	Acetic acid, 17-acetoxy-4,4,10,13-
Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-		Acrylophenone, 3,3-diphenyl-se	Acetic acid, 4-(7-methylydenebicy
Pentasiloxane, dodecamethyl-		Adenosine, 1,2-dihydro-2-oxo-	Acetic acid, 5-chloro-3a,8a-dihydr
Perhydrocyclopropa[e]azulene-4,5		Adenosine-2-thiol, N-dimethyl-	Acetic acid, butyl ester

Perhydro-htx-8-one, 1-acetyl-2-de		Akton	Acetic acid, dichloro-, heptyl ester
Phenol, 2,4-dichloro-6-nitro-		Akuammilan-17-ol, 10-methoxy-	Acetic acid, pentyl ester
phenol, 4-methoxy-2-[2-(5-nitro-2		Anthracene, 9,10-dihydro-9,9,10-t	Acetoacet-p-phenetidide
Phenylalanine, N-trifluoroacetyl-4		Arachidonic amide, N-[5-hydroxy-	Acetoxyacetic acid, heptadecyl est
Phosphine, bis(1,1-dimethylethyl)		Asarone	Acetoxyacetic acid, undec-2-enyl
Piperazine, 1-hex-2-ynyl-4-methyl		Aspidofractinin-3-ol, 17-methoxy-	Adenosine, 1,2-dihydro-2-oxo-
p-Menth-1-en-3-one, semicarbazo		Barbituric acid, 5-(2-bromoallyl)-	Adenosine, N(6)-[3-trifluoromethy
p-Nitrophenyl nonyl ether		Batyl alcohol, 2TMS derivative	Adipic acid, .beta.-citronellyl prop
Pregnan-18-ol, (5.alpha.)-		Benz[e]azulene-3,8-dione, 5-[(ace	Adipic acid, 2-butoxyethyl propyl
Propanoic acid, 3,3'-thiobis-, dido		Benzamide, 2-amino-3,5-dinitro-N	Androstan-11-one, 3-hydroxy-, (3.
Propionitrile, 3-[(2-adamantyliden		Benzenamine, 4-[2-oxo-2-(1-pyrro	Androstane-17-carboxylic acid, 3,
Prosta-5,10,13-trien-1-oic acid, 15		Benzene, [3-(methoxymethoxy)-1-	Arsenous acid, tris(trimethylsilyl)
Sclareolide		Benzene, 1,3-dimethyl-	Barbituric acid, 5-allyl-5-(cyclohe
Sebacic acid, 2,2-dichloroethyl he		Benzeneacetonitrile, 3,4,5-trimeth	Benzamide, N-(2-methoxyacetyl)-
Sebacic acid, ethyl methyl ester		Benzenebutanoic acid, ethyl ester	Benzenamine, N-[[2-(1-methyleth
Showdomycin		benzenesulfonyl chloride, 3-[(4,4-	Benzene, [(2-chlorohexyl)sulfonyl
Silane, (2-ethoxycyclohexyl)trime		Benzimidazole-2-methanol, 1-met	Benzene, 1-(1,1-dimethylethyl)-4-
Silane, chlorodiethylheptyloxy-		Benzo[d][1,3]-oxazin-2-one, perh	Benzene, 1,2,3,5-tetramethyl-4,6-
Silane, dimethyl(2,2,2-trichloroeth		Benzofuran, 7-(2,4-dinitrophenox	Benzene, 1,2,4-tris-trimethylsilyl-
Silane, dimethyl(dodec-9-ynyloxy		Benzoic acid, 2-amino-, 4-methylc	Benzene, 1,3-dimethyl-
Silane, dimethyl(trans-3,7-dimeth		benzoic acid, 3,5-dimethyl-trimet	Benzene, 1-methoxy-2-(2-nitroeth
Silicic acid, diethyl bis(trimethyls		Benzoic acid, 4-(1,3-dioxolan-2-y	Benzene, 1-methyl-4-(4-morpholy
Spirafolide		benzoic acid, 4-[[(trimethylsilyl)o	Benzenebutanoic acid, .alpha.,.alp
Spiro[5.5]undecane, 1-methylene-		Benzyl propiolate	Benzenebutanoic acid, ethyl ester
Stearic acid, TMS derivative		Bicyclo(3.3.1)nonane-2,6-dione	Benzeneethanamine, 2-isothiocya
Strychane, 1-acetyl-20.alpha.-hydr		Bicyclo[1.1.0]butane-1-carboxylic	Benzenepropanoic acid, 4-[(2,4-di
Succinic acid, 2,4,6-trichlorophen		Bicyclo[2.2.1]heptane-1-carboxyli	Benzenepropanoic acid, 4-benzoy
Succinic acid, 2-ethylhexyl 1-phe		Bicyclo[3.1.1]heptan-3-ol, 2,6,6-t	Benzestrol, 2TMS derivative
Succinic acid, 3-methylbut-2-yl ge		Bicyclo[3.1.1]heptan-3-ol, 6,6-di	Benzofuran-2-one, 2,3-dihydro-3,
Succinic acid, cyclohexylmethyl 3		Bicyclo[3.3.0]octan-2-one, 7-neop	Benzoic acid, 4-nitro-, octyl ester
Tartronic acid, 4-(dimethylethylsil		Bicyclo[4.1.0]heptan-2-ol, (1.alph	Benzonitrile, 2-fluoro-4-(4'-propy
Tetracosapentaene, 2,6,10,15,19,2		Bicyclo[4.1.0]heptan-2-one, 3,5,5	Benzothiophene-3(2H)-one, 2-(3-
Tetradecanoic acid, 2,3-dihydroxy		Bicyclo[4.3.0]nonane, 4,5-dimeth	Bicyclo[2.2.1]heptane-1-carboxyli
Tetrahydrofuran-2-one, 3-[1-fluoro		Bicyclo[6.1.0]nonane-9-carboxyli	Bicyclo[2.2.1]heptane-2-carboxal
Tetrasiloxane, 1,1,3,3,5,5,7,7-octa		Bisabolol oxide B	Bicyclo[2.2.2]octanone, 4-methox
Tetrasiloxane, decamethyl-		Boron, [.mu.-(3,5-dimethyl-1H-py	Bicyclo[3.2.1]oct-2-ene, 4-(1,1-di
Thiocyanic acid, 2,4-dinitropheny		Brefeldin A	Bicyclo[4.1.0]heptan-2-ol, (1.alph
Thiourea, N-(1,1-dimethylethyl)-N		Bromoacetic acid, 2-butyl ester	Bicyclo[4.2.0]octa-2,4-diene, 6,7-
Thymol, TBDMS derivative		Butanamide, 3-(2-cyano-1-oxoeth	Bicyclo[5.2.0]nonan-9-one, 8,8-di
Thymol, TMS derivative		Butane, 1-(2,2-dichloro-3-ethylcy	Bis[1,3]benzodioxolo[4,5-c:5',6'-g
trans-2,3-Epoxyoctane		Butyl glycolate	Borinic acid, diethyl-, 3,3,5-trimet
trans-2-Decenoic acid		Carbamazepine-10,11-dihydro-10-	Butanal, 3-methyl-, (2,4-dinitroph
trans-3-(2,2-Dichlorovinyl)-2,2-di		Carbamic acid, (1-phenylethyl)-, 3	Butanamide, 2,2,3,3,4,4,4-heptafl

Trans-3,5-dimethylthiane		carbamic acid, N-[4-[[4-(diethylam	Butane, 2-(2,2-dichloro-1,3-dimet
trans-4-Octylcyclohexylmethanol		Carbomethoxy-2-[carboisopropox	Butanoic acid, 2-methyl-, octyl est
trans-5-Methyl-2-isopropyl-2-hex		Carbonic acid, 2,2,2-trichloroethy	Butanoic acid, octyl ester
trans-Cyclobutane-1,2-dipropanoi		Carbonic acid, nonyl 2,2,2-trichlo	Buturon
tribenzo[de,h,kl]naphtho[1,2,3,4-r		Carbonic acid, propargyl 2,2,2-tric	Butyl 4,8,12-trimethyl-tridecanoat
Tricyclo[4.2.1.0(2,5)]non-7-ene, 3		Card-20(22)-enolide, 2,3,14-trihy	Carbamic acid, (1-phenylethyl)-, 3
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,		Carvacrol, TBDMS derivative	Carbamic acid, N-(7-aminohept-y
Tricyclo[4.3.1.1(2,5)]undec-3-en-1		Carvacrol, TMS derivative	Carbamic acid, N-[10,11-dihydro-
Trimethylsilyl 3-methyl-4-[(trimet		Chloroacetic acid, 4-hexadecyl est	Carbonochloridic acid, 2,2,2-trich
Trimethylsilyl-di(timethylsiloxy)-s		Chloroacetic acid, 4-octyl ester	Card-20(22)-enolide, 1,5,11,14,19
Tris(tert-butyldimethylsilyloxy)ars		Chloromethyl 3-chloro-octanoate	Carda-16,20(22)-dienolide, 3-[(6-
Trisiloxane, 1,1,1,5,5,5-hexameth		Cholesta-3,5-diene	Carda-4,20(22)-dienolide, 3-[(6-d
Undec-10-ynoic acid, butyl ester		Cinnamaldehyde phenylhydrazone	Carteolol, acetate ester
Undec-10-ynoic acid, octyl ester		cis-2,3-Epoxyoctane	Carvacrol, TBDMS derivative
Uridine, 5-heptafluoropropyl-		cis-4-Hydroxycyclohexanecarboxy	Carvacrol, TMS derivative
Z,Z,Z-1,4,6,9-Nonadecatetraene		Cis-4-methylcyclohexanol, dimeth	Chiloscyphone
		cis-p-Mentha-2,8-dien-1-ol	Chloroacetic acid, octyl ester
		Corynan-17-ol, 18,19-didehydro-1	Chloroacetic acid, undecyl ester
		Cyclobarbital	Chloromethyl 3-chloro-octanoate
		Cyclobutanecarboxylic acid 2,2-d	Chloromethyl 5-chlorododecanoat
		Cyclodeca[b]furan-2(3H)-one, dec	Chloromethyl 7-chlorododecanoat
		Cyclodecanol	Chloromethyl octyl ether
		Cyclodecanone, oxime	Cholest-7-en-6-one, 3-(acetyloxy)
		Cyclodecasiloxane, eicosamethyl-	Cholestane, 3-ethoxy-, (3.beta.,5.a
		Cyclohept-4-enecarboxylic acid	Cholesterol margarate
		Cycloheptanol, heptafluorobutyrat	Chromium, tricarbonyl-(2,5-norbo
		Cyclohexane, 1-(1,5-dimethylhexy	cis-1,4-Cyclohexanediol, mono-pe
		Cyclohexane, 1,1-dimethoxy-	cis-1-Chloro-9-octadecene
		Cyclohexane, 1R-acetamido-4-cis	cis-2-(2-Hydroxyethyl)cyclohexan
		Cyclohexane-1,3-dione, 2-allylam	cis-5-Dodecenoic acid, methyl est
		Cyclohexanecarboxamide, N-furfu	cis-Decalin, syn-2-methoxy-
		Cyclohexaneheptanoic acid, 2-pen	cis-p-mentha-1(7),8-dien-2-ol
		Cyclohexanol, 2-(2-ethylhexyl)-	Corymbolone
		Cyclohexanol, 2-methyl-5-(1-meth	Cucurbitacin b, 25-desacetoxy-
		Cyclohexanone, 2-(1-mercapto-1-	Curan-17-oic acid, 19,20-dihydro
		Cyclohexanone, 2-ethyl-4-methox	Curan-17-oic acid, 2,16-didehydro
		Cyclohexanone, 2-methyl-5-(1-me	Cyclobarbital
		Cyclohexanone, 6-methyl-3-(1-me	Cyclodecasiloxane, eicosamethyl-
		Cyclohexanone, O-methyloxime	Cycloheptasiloxane, tetradecamet
		Cyclohexanooxazin-2(1H)-one, 3,	Cyclohexanamine, N-cyclooctylid
		Cyclononasiloxane, octadecameth	Cyclohexane, (1,2,2-trimethylbuty
		Cyclopentane, 2-isopropyl-1,3-di	Cyclohexane, 1,1-dimethoxy-
		Cyclopentaneacetaldehyde, 2-form	Cyclohexane, 1-ethyl-2-methyl-

		Cyclopentanemethanol, .alpha.-(1	Cyclohexane, 1-propenyl-
		Cyclopentanol, 1-(1-methylene-2-	Cyclohexane, methyl-
		Cyclopropane, 1-(1-hydroxy-1-he	Cyclohexane-1,2-dicarboxylic aci
		Cyclopropane, 1,1-dichloro-2,2,3,	Cyclohexanecarbonitrile, 3,3,5,5-t
		Cyclopropanebutanoic acid, 2-[[2-	Cyclohexanecarboxylic acid, 2-ox
		Cyclopropanecarboxylic acid,2-(1	Cyclohexanecarboxylic acid, 4-ch
		Cyclopropanedecanoic acid, 2-hex	Cyclohexanecarboxylic acid, 4-pe
		Cyclotetrasiloxane, octamethyl-	Cyclohexanemethanol, 4-ethenyl-.
		Cyclotrisiloxane, hexamethyl-	Cyclohexanepropanoic acid, 2-pro
		Cystathionine, 2TMS derivative	Cyclohexanone, 2-(2-propenyl)-
		Dasycarpidan-1-methanol, acetate	Cyclohexanone, 2,6-dimethyl-
		Decane, 3-methyl-	Cyclohexanone, 3-carbomethoxy-
		Decanenitrile	Cyclohexanone, 4-methyl-, semica
		Decanoic acid, 10-fluoro-trimeth	Cyclohexanone, O-methyloxime
		d-Glucitol, 1-S-hexyl-1-thio-	Cyclooctane-1,4-diol, cis
		D-Glucopyranose, 4,6-O-heptylid	Cyclooctanone, oxime
		D-Glucopyranose, 4,6-O-octyliden	Cyclopentane, (1,1-dimethylethyl)
		Dicyclopropylmethanol, pentafluo	Cyclopentane, 1-methyl-3-(1-meth
		Diethylmalonic acid, 3,7-dimethyl	Cyclopentanecarbonitrile, 5-hydro
		Diethylmalonic acid monochlorid	Cyclopentanemethanamine, 2-ami
		Digitoxin	Cyclopentane-trans-1,3-dicarboxa
		Diglycolic acid, 3,7-dimethyloctyl	Cyclopentanol, 1-(methylenecyclo
		Diglycolic acid, di(hexyl) ester	Cyclopentanol, acetate
		Diglycolic acid, di(isobutyl) ester	Cyclopentanone, 2-acetyl-3,3-dim
		Diglycolic acid, hexyl oct-4-yl est	Cyclopropane, 1-(1-hydroxy-1-he
		Dimethylmalonic acid, 3-methylph	Cyclopropane, 1,1-dichloro-2,2,3,
		Di-n-decylsulfone	Cyclopropane, 2-butyl-1,1-dichlor
		Di-n-octyl phthalate	Cyclopropane, pentachloro-
		Disiloxane, 1,3-diethoxy-1,1,3,3-t	Cyclopropanecarboxylic acid, 2,2-
		d-Lyxo-d-manno-nononic-1,4-lact	Cyclopropanedecanoic acid, 2-hex
		d-Mannitol, 1-decylsulfonyl-	Cyclopropanetetradecanoic acid, 2
		d-Mannitol, 1-O-(16-hydroxyhexa	Cyclotetrasiloxane, octamethyl-
		D-Manno-(Z)-tetradec-6-ene-1,2,3	Cyclotrisiloxane, hexamethyl-
		D-Mannotridec-6-ene-1,2,3,4,5-pe	D:A-Friedooleanan-28-al, 3-oxo-
		Docosanoic acid	Decane
		Docosanoic acid, docosyl ester	Decane, 1,10-diiodo-
		Dodecyl acrylate	Decanenitrile
		D-Streptamine, O-6-amino-6-deox	D-Fructose, 1,3,6-trideoxy-3,6-ep
		E-10-Methyl-11-tetradecen-1-ol p	d-Glucitol, 6-desoxy-6-thio-n-octy
		E-11-Tetradecenol, trimethylsilyl e	Dichloroacetic acid, 2-methyloct-5
		E-2-Methyl-3-tetradecen-1-ol acet	Diethyl butylmalonate
		Ergostane-3,6-dione, 25-(acetylox	Diethylmalonic acid, di(2-methox
		Erucic acid	Digitoxin

		Estra-1,3,5(10)-trien-17.beta.-ol	Diglycolic acid, butyl hexadecyl e
		Ethanethioic acid, S-[8-(diethylph	Diglycolic acid, decyl heptyl ester
		ethanone, 1-[5-(dimethylamino)-2	Dihydroartemisinin, 10-O-(t-butyl
		Ethanone, 2-(2,4-dichlorophenoxy	Dimethyl 2-ethylpentane-1,5-dioa
		Ethanone, 2-azido-1-(4-methyl-3-f	Dimethylmalonic acid, 2-isopropo
		Ethyl 2-(2-oxocyclopentyl)propio	Dimethylmalonic acid, heptyl 2-is
		Ethyl 4,4,6,6,8,8-hexamethyl-11-o	Dimethylmalonic acid, isohexyl 2,
		Ethyl 4-{[(3-cyano-4,6-dimethylp	Dimethylmalonic acid, monochlor
		Ethyl E-11-octadecenoate	Di-n-decylsulfone
		Ethyl geranyl acetate	Di-n-octyl phthalate
		Ethyl homovanillate, TMS derivat	Disiloxane, 1,3-diethoxy-1,1,3,3-t
		Ethyl homovanillate, TMS derivati	d-Mannitol, 1,1'-O-1,16-hexadeca
		Ethyl propionate, 2,2'-dithiobis-	d-Mannitol, 1-decylsulfonyl-
		Ethylbenzene	d-Mannitol, 1-O-(16-hydroxyhexa
		Fumaric acid, 2,4,4-trimethylpenty	E,E,Z-1,3,12-Nonadecatriene-5,14
		Fumaric acid, 2-chloroethyl octad	E,Z-2,15-Octadecadien-1-ol aceta
		Fumaric acid, 3-fluorophenyl tetra	E-2-Methyl-3-tetradecen-1-ol acet
		Fumaric acid, cyclohexyl nonyl es	E-5-Dodecen-1-ol acetate
		Fumaric acid, heptadecyl 2-pentyl	E-8-Methyl-7-dodecen-1-ol acetat
		Fumaric acid, octadecyl 3-pentyl e	Eicosanoic acid, methyl ester
		Gallic acid, 4TMS derivative	endo-2-Methyl-2-norbornanol
		Germacyclopent-3-ene, 1,1-diethy	Ergosta-5,22-dien-3-ol, acetate, (3
		Ginsenol	Ethanol, 2,2,2-trichloro-
		Glutaric acid, 2,2-dichloroethyl oc	Ethanone, 1-[2,3-dihydro-6-hydro
		Glutaric acid, di(2-isopropoxyphe	Ethanone, 1-[4-[4-(2-hydroxyethy
		Glutaric acid, tridec-2-yn-1-yl dec	ethanone, 1-[5-(dimethylamino)-2
		Glycerol monostearate, 2TMS der	Ethanone, 1-bicyclo[2.2.1]hept-2-
		Glycine, N-allyloxycarbonyl-pen	Ethanone, 2-azido-1-(4-methyl-3-f
		Gorgost-5-en-3-ol, (3.beta.)-, TMS	Ethinamate
		Guanidine, 1-[4-(2-pyridyl)thiazol	Ethisterone, O-methyloxime
		Haloxazolam	Ethyl (8R,S)-cis-bicyclo[4.3.0]-3-
		Heneicosanoic acid, methyl ester	Ethyl 2-(2-chloroacetamido)-3,3,3
		Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,	Ethyl 3-[3-(6,6-dimethyl[3.1.1]he
		Heptasiloxane, hexadecamethyl-	Ethyl 5-(chloromethyl)-2-oxooxol
		Hexacosanoic acid, methyl ester	Ethyl homovanillate, TMS derivat
		Hexadecanenitrile	Ethyl iso-allocholate
		Hexadecanoic acid, (2-phenyl-1,3-	Ethyl nerate
		Hexadecanoic acid, 2-bromo-	Ethyl-1-thio-.beta.-d-glucopyrano
		Hexane, 2,2,3,3-tetramethyl-	Ethylbenzene
		Hexanedial	Ethylene, 1-(2-(5-methyl)-furyl)-2
		Hexanoyl chloride	Eucalyptol
		Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,	Farnesol, TMS derivative
		Hexestrol, 2TMS derivative	Fluoxymesterone

		Hexobarbital	Fumaric acid, 2-chloro-5-methylp
		Hexylbis(trifluoromethyl)phosphi	Fumaric acid, 2-methoxyphenyl 2-
		Hydrazinecarbothioamide, 2-(2-m	Fumaric acid, 3-heptyl tridecyl est
		Hydrazinecarboxamide, 2-(2,6-cyc	Fumaric acid, 4-chlorophenyl dec
		Imidazole-1-carbodithioic acid ph	Furan, tetrahydro-3-methyl-4-meth
		Imidazolo[3,4-b]isoxazole, perhyd	Furazano[3,4-b]pyrazine-5-acetic
		i-Propyl 9-tetradecenoate	Furazolidone
		Iron, tricarbonyl[(1,2,5,6-.eta.)-1,5	Geranyl ethyl ether 2
		Iron, tris(.eta.3-2-propenyl)-	Germacrene A, 9-(methylthio)-
		Isoborneol, pentamethyldisilanyl e	Ginsenol
		Isoindole-1,3-dione, 5-chloro-2-(2	Glutaric acid, cyclohexylmethyl d
		Isonicotinic acid, 2,6-dichloro-et	Glutaric acid, dec-2-yl 2,4,4-trime
		Isophthalic acid, allyl dodecyl este	Heptane
		Isophthalic acid, allyl pentadecyl e	Heptane, 1,1,1,3-tetrachloro-
		Isophthalic acid, allyl undecyl este	Heptane, 3,4-dimethyl-
		Isophytol, acetate	Heptanedioic acid, 4-methyl-, dim
		Isoxazole, 4,5-dihydro-4-(1-methy	heptanoic acid, 7-[(trimethylsilyl)
		Kauran-18-al, 17-(acetyloxy)-(4.	Heptanoic acid, heptyl ester
		Levomenthol	Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,
		l-Gala-l-ido-octose	Heptasiloxane, hexadecamethyl-
		l-Lysine, N2-[(2,4-dichlorophenox	Hexahydropyridine, 1-methyl-4-[4
		L-Phenylalaninamide, 5-oxo-L-pr	Hexanoic acid, 3-(2,2,3,3-tetramet
		l-Phenylalanine, N-isobutoxycarb	Hexanoic acid, 6-(diethoxyphosph
		L-Valine, N-[2-(chloroimino)-3-m	Hexanoic acid, phenylmethyl ester
		Manganese, pentacarbonyl(2,3,3,4	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,
		Methyl 1,4,14-tetradecanetrioate	Hexasiloxane, tetradecamethyl-
		Methyl 12-oxo-9-dodecenoate	Hexestrol, 2TMS derivative
		Methyl 17-acetoxyoctadecanoate	Histamine, N-BOC-5-iodo-
		Methyl 3-hydroxy-1,2-oxazole-5-c	Homovanillic Acid, 2TMS derivati
		Methyl abietate isomer	Hydantoin, 5-(p-hydroxyphenyl)-5
		Methyl E-11-tetradecenoate	Hydrazinecarbodithioic acid, [(4-n
		Morphinan-3,14-diol, 4,5-epoxy-,	Hydrazinecarboxamide, 2-(2,6-cyc
		Morpholine, 4-(4-ethylcyclohexan	Imidazolo[3,4-b]isoxazole, perhyd
		N-(4-Hydroxy-2-cyclohexen-1-yl)	Ingol 3,8,12-triacetate
		N-(Furan-2-ylmethyl)-2-[5-(pyridi	Iron, tricarbonyl[(1,2,5,6-.eta.)-1,5
		N,N,N-Trimethyl-N-(2-hydroxyph	Iron,(1-phenylethyl)dicarbonyl-.pi
		N,N-Dimethyl-4-nitroso-3-(trimet	Isobenzofuran-1(3H)-one, 3,6,7-tr
		N-[4-Chloro-2-chloroacetamidoph	Isolongifolan-8-ol
		Naphth[2,3-b]oxirene, decahydro-	Isophthalic acid, allyl undecyl este
		Naphtho[2,1-d][1,3]dioxepin, dod	Isophthalic acid, cis-tetradec-3-en
		N-Chloroacetyl-cyclohexamine	Isopulegol
		N-Cyclooct-4-enylacetamide	Ketone, methyl 2-pyridyl, 4-cyclo
		Nickel, 2,6,10-dodecatriendi-1,12	Lanostan-3.beta.-ol, 11.beta.,19-e

		Nicotinic acid (7-methoxy-2-oxo-	Lumazine, 8-ethyl-6,7-dimethyl-
		N-Methyl-1-adamantaneacetamide	Lupan-3-ol
		N-Nitroso-2-ethyl-1,3-tetrahydroo	Malonic acid, mononitrile, monot
		n-Octanoic acid isopropyl ester	Menthol, (2,3-dihydroxy-2-methyl
		Nonane, 3-bromo-1,1-dichloro-	Methoxyacetic acid, 2-(1-adamant
		Nonanenitrile	Methyl 10-methoxycarbonyl-17-o
		Nonanoic acid, 9-oxo-, 1-methylet	Methyl 10-oxo-8-decenoate
		Norgestrel, trimethylsilyl ether	Methyl 11-thia-octadecanoate
		n-Propyl 9-octadecenoate	Methyl 14-methyl-eicosanoate
		n-Propylimine, acetylmalonic acid	Methyl 17-acetoxyoctadecanoate
		N-tert-Butoxycarbonylimidazole	Methyl 2-methylsulfonyl-.alpha.-d
		Octadecane, 1,1'-[1,3-propanediyl	Methyl 3,4-di-O-acetyl-2,6-di-O-
		Octadecanoic acid, 16-oxo-meth	Methyl 3-hydroxyoctadec-9-enoat
		Octadecanoic acid, 3-hydroxy-m	Methyl 8-methyl-decanoate
		Octadecanoic acid, 3-hydroxy-2-te	Methyl trans-2-octadecenoate
		Octadecanoic acid, 9,10-epoxy-18	Methyl-(9-oxa-bicyclo[3.3.1]non-
		Octadecanoic acid, propyl ester	Milbemycin b, 13-chloro-5-demet
		Octahydro-2,2-dimethyl-5,8-epox	Mitozolomide
		Octanal, (2,4-dinitrophenyl)hydra	Morphinan-3,14-diol, 4,5-epoxy-,
		Octane	Myrtanol, 2-mercapto-
		Octanoic acid, 2-methyloct-5-yn-4	N-(1-Bicyclo[2.2.1]hept-2-yl-ethy
		Octanoyl chloride	N-(1H-2-Oxo-pyrimidin-4-yl)-ami
		Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1	N-(2-Methoxyethyl)alanine
		Olean-12-ene-3,16,21,22,28-pento	N-(3-Methoxy-2-pyrazinyl)-4-(3-[
		Oleic Acid, (Z)-, TMS derivative	N-(5-Chloro-2-pyridyl)-3,3,3-trifl
		o-Mentha-1(7),8-dien-3-ol	N,N'-Pentamethylenebis[s-3-amin
		Oxalic acid, 2-ethylhexyl octadecy	N-[2-(6-Amino-9H-purin-9-yl)eth
		Oxirane, (2-methylbutyl)-	N1-(2-Furylmethyl)-2-(3-pyridylm
		Palladium, (.eta.5-2,4-cyclopentad	Naphth[2,3-b]oxirene, decahydro-
		Penta-2,4-dien-1-one, 5-dimethyla	Naphthalene, 1-bromo-
		Pentafluoropropionic acid, nonyl	Naphthalene, decahydro-1,4-dime
		Pentane, 1-(2,2-dichloro-1-methyl	Naphthalene, decahydro-1,8a-dim
		Pentane, 3-(2,2-dichloro-3-methyl	N-Benzylmaleimide
		Pentanoic acid, 1-cyclopentylethy	N-Cyclohexyl-N'-4-[N-aziridyl]bu
		Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-	n-Dodecylpyridinium chloride
		Pentasiloxane, dodecamethyl-	N-Ethyl-hexahydro-1H-azepine
		Perhydro-htx-2-one, 2-depentyl-,	N-Hexadecylpyridinium bromide
		Perhydro-htx-8-one, 1-acetyl-2-de	n-Hexane
		Phenacyl 11-octadecenoate	Nickel, bis(N,N,N'-trimethyl-o-ph
		Phenol, 2-(6-bromoquinolin-8-yl)i	Nicotinic acid (7-methoxy-2-oxo-
		Phenol, 4-bromo-2,5-dichloro-	Nicotinic acid, 1,6-dihydro-4-hyd
		Phosphorous acid, tris(2-ethylhex	Nipecotic acid
		Piperidin-2,6-di-carboxylic acid	N-Isopentylidene-2-butylamine

		piperidine, 1-(5-fluoro-2-nitrophe	N-Methyl-1-adamantaneacetamide
		Piperityl angelate, cis-	N-Methyl-2-[1-[pyrazinyl]ethylide
		p-Mentha-6,8-dien-2-one, semicar	Nonane, 4-methyl-
		Pregn-5-en-20-one, 3,8,12,14-tetr	n-Propyl 9-octadecenoate
		Pregna-4,6-diene-3,20-dione, 17-h	Octadecane, 1-(methylthio)-
		Pregnan-20-one, 12-(acetyloxy)-3,	Octadecane, 1,1'-[1,3-propanediyl
		Pregnan-20-one, 3,17,21-tris[(trim	Octadecanoic acid, 3-hydroxy-, m
		Propanal, 2-(benzoyloxy)-, (R)-	Octan-2-yl propyl carbonate
		Propanamide, 3-cyclopentyl-N-pe	Octane
		Propanamide, N-(4-ethoxy-2-meth	Octanoic acid, 2-ethylhexyl ester
		propanedinitrile, 2-[2-[(2,6-diphen	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1
		Propanenitrile, 3-(5-diethylamino-	Oleic Acid, (Z)-, TMS derivative
		Propanenitrile, 3-[1-methyl-5-(1-p	Oxetane, 3,3-dimethyl-
		Propanoic acid, 2,2-dimethyl-[3-	Oxirane, [(2-propenyloxy)methyl]
		Propanoic acid, 2,2-dimethyl-2,3	Oxymetholone Methanol Adduct
		Propanoic acid, 2-chloro-pentyl	Palladium(0), (.eta.2-2,5-furandio
		Propanoic acid, 3-chloro-2,2-dime	Patchouli alcohol
		Propionic acid, 3-(2-methylcycloh	p-Dihydroartemisininoxymethylbe
		Propionitrile, 3-[(2-adamantyliden	Pentadec-7-ene, 7-bromomethyl-
		Propiophenone, 3-phenyl-3-piperi	Pentadecanoic acid
		Pseudosarsasapogenin-5,20-dien	Pentadioic acid, dihydrazide, N2,
		p-Toluenesulfonic acid n-heptyl es	Pentafluoropropionic acid, heptyl
		Purine-2,6-dione, 7-ethyl-1,3-dim	Pentane, 1,1,1,5-tetrachloro-
		Pyrazine, 2,5-bis(1,1-dimethylethy	Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-
		Pyrazol-5-amine, 4-tert-butylsulfo	Pentasiloxane, dodecamethyl-
		Pyridine, 1,2,3,6-tetrahydro-1-met	Perfluorooctanoic acid, 4-methylp
		Pyridine, 2-(methylthio)-3-nitro-	PFP derivative of epicoprostanol
		Pyridine, 3-nitro-2-(2H-1,2,3-triaz	Phenanthrene, tetradecahydro-
		Pyrido[1,2-a][1,3]benzimidazole-3	Phenol, 2,4-dichloro-6-nitro-
		Pyrido[1,2-a]pyrimidin-4(5H)-one	Phenylacetic acid, 2-(1-adamantyl
		Pyrido[4,3-d]pyrimidin-4(3H)-one	Phenylacetic acid, 4-(cyclohexane
		Pyrimidine-2,4,6(1H,3H,5H)-trion	Phenylboronic acid, 2TMS derivat
		Pyrimido[4,5-d]pyrimidine-2,4(1H	Phenytoin, 2TMS derivative
		Pyrrolidine-2,5-dione, 1-ethyl-3,3'	p-Hexyloxy nitrobenzene
		pyrrolo[1,2-a]pyrimidin-8a(6H)-ol	Phosphinic acid, dicyclohexyl-, an
		pyrrolo[3,4-f]isoindole-1,3,5,7(2H	Phosphorothioic acid, O-(1,6-dihy
		Sarreroside	Phosphorothioic acid, O-(4,5-dich
		Sebacic acid, di(2,2-dichloroethyl	Pimelic acid, di(2-chlorophenyl) e
		Silane, [(11-chloroundecyl)oxy]tri	Piperazine, 1-[1-(4-fluorobenzene
		Silane, 1,3-decadiynyltrimethyl-	p-Menth-1-en-3-one, semicarbazo
		Silane, chlorodiethyl(4-octyloxy)-	p-Mentha-6,8-dien-2-one, semicar
		Silane, chlorodiethylheptyloxy-	Pregn-4-en-17,21-diol-3,20-dione
		Silane, triethyl(2-phenylethoxy)-	Pregna-4,6-diene-3,20-dione, 17-h

		Silanol, trimethyl-, phosphite (3:1	Pregnane-3,17,20-triol, cyclic 17,
		Silicic acid, diethyl bis(trimethyls	Pregnane-3,20-dione, 11-[(trimeth
		Spirafolide	Propanedioic acid, (1-methyl-2-pr
		Spiro[2.5]octane-1,1-dicarbonitril	Propanoic acid, 2-methyl-, 2-ethyl
		Spiro[4.5]decane, 6-methylene-	Pseudosmilagenin bis[3,5-dinitrob
		Spirohexan-4-one, 5,5-dichloro-6,	Purine, 6-carboxamido-9-.beta.-d-
		Spirohexane-1-carboxylic acid, et	Purine-2,6-dione, 8-(3-ethoxyprop
		Succinic acid, 3-methylbut-2-en-1	Pyrazol-5-amine, 4-tert-butylsulfo
		Succinic acid, 3-methylbut-2-yl de	Pyrethrin II
		Succinic acid, cyclohexylmethyl 2	Pyridazine, 3-amino-6-chloro-, 2-
		Succinic acid, cyclohexylmethyl 3	Pyridine, 1,2,3,6-tetrahydro-1-met
		Succinic acid, cyclohexylmethyl c	Pyridine, 2-[(trimethylgermyl)met
		Succinic acid, di(tetradec-11-enyl)	Pyrido[1,2-a]pyrimidin-4(5H)-one
		Succinic acid, tridec-2-yn-1-yl but	Pyrrolidine-1-thiocarboxylic acid
		Sucrose	Retinal
		Tartronic acid, 4-(dimethylethylsil	Salicylic acid, 2TMS derivative
		Terephthalic acid, 3-methyl-5-met	Sebacic acid, di(2,2-dichloroethyl
		Terephthalic acid, di(3-methyl-5-m	Securinan-11-one, 4-methoxy-, (4.
		tert-Butyldimethylsilyl 2,3-dimeth	Silane, (dichloromethylene)bis[tri
		Tetrahydroimidazole-4-carboxylic	Silane, [[(3.alpha.,5.beta.,11.beta.,
		Tetraponerine T4	Silane, chlorodiethylheptyloxy-
		Tetrasiloxane, decamethyl-	Silane, chloro-tris(methoxy)-
		Thiocyanato[.alpha.N,N-3-azabicy	Silane, dimethyl(2,2,2-trichloroeth
		Thiocyanic acid, 5.alpha.-cholesta	Silane, methylvinyl(phenoxy)etho
		Thiourea, N-(3-methoxyphenyl)-N	silane, trimethyl[[5-methyl-2-(1-m
		Threitol, 2-O-heptyl-	Silicic acid, diethyl bis(trimethyls
		Thymol, TBDMS derivative	Solasonine
		Thymol, TMS derivative	Sorbitol
		Titanium, [(1,2,3-.eta.)-2-butenyl]	Spiro[3.5]nonan-1-one
		trans-1,2-Diethoxycyclohexane	Spiro[9,9']difluorene, 2,2'-(2,5,8,1
		trans-2-Dodecenoic acid	Stannane, 1,3-dithian-2-ylidenebis
		trans-2-Ethyl-2-hexen-1-ol	Stearic anhydride
		trans-4-Octylcyclohexylmethanol	Stigmastane-3,6-dione, (5.alpha.)-
		trans-syn-trans-dicyclohexyl-18-cr	Succinic acid, 2,2,3,3,4,4,5,5-octa
		Tricosane-1,15-diol, bis(O-trimeth	Succinic acid, 2,4-dimethylpent-3
		Tricyclo[4.2.1.0(2,5)]non-7-ene, 3	Succinic acid, 2,5-difluorobenzyl
		Tricyclo[4.2.1.0(2,5)]nonane, 3,3,	Succinic acid, 2-ethylhexyl non-3
		Tridecane, 3-methyl-	Succinic acid, 3-methylbut-2-en-1
		Triethylidene mannitol	Succinic acid, dodec-2-en-1-yl cis
		Trimethyl[2-(tetramethyl-1,3,2-dio	Tartronic acid, 4-(dimethylethylsil
		Tris(tert-butyldimethylsilyloxy)ars	Terbutryn
		Trisiloxane, 1,1,1,5,5,5-hexameth	Terephthalic acid, dec-4-enyl unde
		Undec-10-ynoic acid, decyl ester	Terephthalic acid, heptyl 3-methyl

		Undec-10-ynoic acid, hexyl ester	tert-Butyl (2-aminophenyl)carbam
		Urea, N-[5-(ethylsulfonyl)-1,3,4-t	tert-butyl(dimethyl)silyl 2-([tert-b
		Uridine, 5-tridecafluorohexyl-	tert-Butyldimethylsilyl 2-(3-aceto
		Urs-12-en-28-ol	tert-Butyldimethylsilyl 2,3-dimeth
		Z,Z,Z-1,4,6,9-Nonadecatetraene	Testosterone isocaproate
		Z-11,13-Tetradecadien-1-ol acetat	Tetradecanoic acid, 2-hydroxy-, m
		Z-3-Octadecen-1-ol acetate	Tetrahydrofuran-2-one, 3-[1-fluoro
		Z-8-Methyl-9-tetradecen-1-ol form	Tetraponerine T4
		Z-8-Pentadecen-1-ol acetate	Tetrasiloxane, 1,1,3,3,5,5,7,7-octa
			Thieno[2,3-c]furan-3-carbonitrile,
			Thiirane, octyl-
			Thiophene, 2-(2,2-dimethylpropyl
			Thiophene-2-carboxaldehyde, phe
			Thiourea, N-(2-methoxyphenyl)-N
			Thiourea, N-(6-aminopyrid-2-yl)-
			threo-8,9-Dichlorododecan-1-ol a
			Thymol, TBDMS derivative
			Thymol, TMS derivative
			Toluene
			trans-.beta.-Terpinyl pentanoate
			trans-1,3-Bis(acetamidomethyl)cy
			trans-2-Ethyl-2-hexen-1-ol
			trans-2-Hexenoic acid, 5-methyl-2
			trans-3,4-Epoxynonane
			trans-Z-.alpha.-Bisabolene epoxid
			tribenzo[de,h,kl]naphtho[1,2,3,4-r
			Trichloroethanol, TBDMS derivat
			Tricyclo[4.2.1.0(2,5)]non-7-ene, 3
			Tricyclo[4.2.1.0(3,7)]nonane-3,8-d
			Tricyclo[4.2.1.1(2,5)]dec-3-en-9-o
			Tricyclo[4.2.1.1(2,5)]decan-9-one,
			Tricyclo[8.4.1.1(3,8)]hexadeca-3,5
			Trifluoroacetic acid, 2-methylprop
			Trimethylsilyl 3-methyl-4-[(trimet
			Tris(tert-butyldimethylsilyloxy)ars
			Trisiloxane, 1,1,1,5,5,5-hexamethy
			Undec-10-ynoic acid, oct-3-en-2-y
			Undec-10-ynoic acid, octyl ester
			Undecanoic acid, 11-mercapto-
			Undecyl 5-bromovalerate
			Uridine, 5-heptafluoropropyl-
			Vanadium, (.eta.7-cycloheptatrien

T6	**T7**	**T8**	**T9**	**T10**
(+-)-trans-1-Isopropenyl-4-methyl	(1R,2R,8S,8Ar)-8-hydroxy-1-(2-h	(1R,2R,8S,8Ar)-8-hydroxy-1-(2-h	(.+/-.)-Ambreinolide	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4
(1aR,1bS,2aS,5S,5aS,7aS)-2,2,5,7	(1S,4R,5R)-1,3,3-Trimethyl-2-oxa	(2E,4E)-N-Isobutyltetradeca-2,4-d	(1-Cyanocyclohexyl) carbamate	(2S,2'S)-2,2'-Bis[1,4,7,10,13-pent
(1-Cyanocyclohexyl) carbamate	(2,7-Octadienyl)succinic anhydrid	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	(1R,2S,8As)-8-oxo-1-carboxymet	(3S,3aS,6R,7S,8aS)-3,7,8,8-Tetra
(2E,4E)-N-Isobutylhexadeca-2,4-d	(2E,4E)-5-Chloro-3,4-dimethyl-2,	(3E,10Z)-Oxacyclotrideca-3,10-di	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	1-(.beta.-d-Ribofuranosyl)-4-diflu
(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	(2E,4E)-N-Isobutyltetradeca-2,4-d	(7R,8RS)-7-hydroxymethyl-8-etho	(2R,4R)-p-Mentha-[1(7),8]-diene,	1-(1-Methoxycyclopropyl)-3-meth
(3,5-Dimethyl-1H-pyrazol-1-ylmet	(2E,4E,10E)-N-Isobutylhexadeca-	(9Z,12Z)-2,3-Dimethoxypropyl oc	(3,5-Dimethylpyrazol-1-ylmethyl)	1-(2-Methoxyethoxy)-2-methyl-2-
(3,7-Dimethyl-2,6-dioxo-2,3,6,7-t	(2R,3R,4aR,5S,8aS)-2-Hydroxy-4	(Z)-1,3-Dimethoxypropan-2-yl oct	(6,7-Dimethoxy-2H-1,3-benzodio	1-(t-Butyldimethylsilyl)-3,7-dimet
(3E,10Z)-Oxacyclotrideca-3,10-di	(2S,2'S)-2,2'-Bis[1,4,7,10-tetraoxa	(Z)-Decyl icos-9-enoate	(E)-But-2-en-1-yl propyl carbonat	1,1,1,3,5,5,5-Heptamethyltrisiloxa
(3-Methoxybenzoyl)carbamic acid	(3,5-Dimethylpyrazol-1-ylmethyl)	.alpha.-[5-Ethyl-2,3,4,5-tetrahydro	(t-Butyl-dimethylsilyl)[2-methyl-2	1,11-Undecanediol, 2TMS derivat
(3-Oxo-2-pent-2-enylcyclopentyl)	(3,5-Dioxo-4-azatricyclo[5.2.2.0(2	.alpha.-D-Glucofuranose, 6-chloro	.alpha.-D-Glucopyranoside, 1-O-m	1,1-Cyclobutanedicarboxamide, 2
(7a-Isopropenyl-4,5-dimethyloctah	(3R,5aS,9aR)-2,2,5a,9-Tetramethy	.gamma.-Guanidinobutyric acid	.beta.-Vatirenene	1,1-Difluoro-2,2,3-trimethyl-cyclo
(7R,8R)-Ethyl 8-hydroxy-trans-bi	(5S,6aR,10aS)-5-Propyldecahydro	[1,1'-Bicyclopropyl]-2-octanoic ac	.delta.-Tocopherol, TMS derivativ	1,2,4-Triazol-4-amine, 5-ethyl-3-(
(E)-2-bromobutyloxychalcone	(7R,8R)-7-Hydroxymethyl-8-meth	[4-(3-Fluoro-4-methoxy-benzenes	[1,1'-Bicyclopropyl]-2-octanoic ac	1,2-Benzenediol, 3,5-bis(1,1-dime
(E)-3(10)-Caren-4-ol	(7S,8R,S)-7-Hydroxymethyl-8-eth	1-(.beta.-d-Ribofuranosyl)-4-diflu	1-(.beta.-d-Ribofuranosyl)-4-diflu	1,2-Bis(trimethylsilyl)benzene
(E)-But-2-enyl ethyl carbonate	(E,Z,Z)-2,4,7-Tridecatrienal	1-(4-Chlorophenoxy)-1-(1H-imida	1-(4-Amino-furazan-3-yl)-5-pyrrol	1,2-Butanediol, 1-(2-furyl)-3-meth
(R)-Pantetheine-1-[(R,S)-2-bromo	(S,S,S,S)-1,1'-Bicyclopentyl-2,2'-	1,1,3,3,5,5,7,7-Octamethyl-7-(2-m	1-(4-Chlorophenoxy)-1-(1H-imida	1,3,2-Dioxaphosphorinane, 2-(2-f
(S)-2-Chloro-4-methylvaleric acid	(Z)-Non-3-en-1-yl 2-methylbutano	1,1,3,3-Tetraallyl-1,3-disilacyclob	1,1,1,3,5,5,5-Heptamethyltrisiloxa	1,3,5-Triazine-2,4-diamine, 6-hyd
(S,S,S,S)-1,1'-Bicyclopentyl-2,2'-	.beta.-n-Butylether of 11-epi-dihy	1,11-Undecanediol, 2TMS derivat	1,1,2,2-Tetramethyl-digermane	1,3-Cyclohexanediol
(Z)-1-Allyl-2-(prop-1-en-1-yl)disu	.gamma.-Cyano-3-methyl-5,10-dih	1,1'-Bicyclohexyl, 4-propoxy-4'-p	1,11-Undecanediol, 2TMS derivat	1,4-Benzenediol, 2,5-bis(1,1-dime
.beta.-Methylether of 11-epi-dihyd	[1,1'-Bicyclohexyl]-4-carboxylic a	1,1-Diethyl-4-phenylsemicarbazid	1,2,3,6,9-Pentaazaspiro[4.4]non-2	1,4-Bis(trimethylsilyl)benzene
[[(7-Methoxy-6-nitro-2H-1,3-benz	[1,1'-Bicyclopropyl]-2-octanoic ac	1,2,4-Cyclopentanetrione, 3-isova	1,2,5-Oxadiazol-3-amine, 4-[5-[(4	1,8-Dioxa-5-thiaoctane, 8-(9-bora
[1,1'-Bicyclopropyl]-2-octanoic ac	[1,2,4]Triazolo[1,5-a]pyrimidine-6	1,2-Bis(trimethylsilyl)benzene	1,2-Benzisothiazol-3-amine, TBD	1.alpha.-(Hydroxymethyl)-7.alpha
[2,5-Dioxo-1-(m-tolyl)-3-pyrrolidi	[1,2,4]Triazolo[3,4-b][1,3,4]thiadi	1,2-dihydro-8-hydroxylinalool	1,2-Bis(trimethylsilyl)benzene	10,11-Dihydro-10-hydroxycarbam
[5-(Hydroxymethyl)-2-(pyridin-3-	[5,9-Dimethyl-1-(3-phenyl-oxiran	1,3,5,7,9-Pentaethyl-1,9-dibutoxy	1,2-Dimethoxy-4-(1-methoxy-1-pr	10-Chlorodecyl 3,5-dinitrobenzoa
1-(.beta.-d-Arabinofuranosyl)-4-O	1-(.beta.-d-Arabinofuranosyl)-4-di	1,3,5-Triazine-2,4-diamine, 6-hyd	1,2-Epoxy-3,4-dihydroxycyclohex	10-Undecenoic acid, propyl ester
1(2H)-Naphthalenone, 3,4,4a,7,8,	1-(.beta.-d-Ribofuranosyl)-4-diflu	1,3-Propanediol, dimethanesulfon	1,3,2-Dioxaphosphorinan-2-amine	11,13-Dimethyl-12-tetradecen-1-o
1-(2-Hydroxyimino-2-phenyl-ethy	1-(1-Methoxycyclopropyl)-3-meth	1,3-Propanediol, ethyl octacosyl e	1,3,5-Triazine-2(1H)-thione, 5-cyc	11-Hydroxy-11-methyl-tricyclo[4.
1-(2-Nitroanilino)-1-deoxy-.alpa.-	1-(2,2-Dimethyl-[1,3]dioxan-5-yl)	1,4-benzenediol, 2-(2-butoxy-2-m	1,3-Dioxolane, 4-pentyl-5-propyl-	11-Oxatetracyclo[4.2.1.1(2,5).1(7,
1-(3,3-Dimethyl-but-1-ynyl)-2,2,3	1-(4-Chlorophenoxy)-1-(1H-imida	1,4-Benzenediol, 2,5-bis(1,1-dime	1,4-Benzenedicarboxylic acid, bis	13,16-Octadecadienoic acid, meth
1-(3,3-Dimethylbutyn-1-yl)-2,2-di	1-(Pyrrolidin-1-yl)cyclopentane-1	1,4-Bis(trimethylsilyl)benzene	1,4-Benzenediol, 2,5-bis(1,1-dime	14-Methylpentadec-9-enoic acid m
1-(5-Methyl-2-thiazolin-2-yl)-1-p	1,1,3,3-Tetraallyl-1,3-disilacyclob	1,4-Bis[methyl(trimethylene)silylo	1,4-Bis(trimethylsilyl)benzene	1b,4a-Epoxy-2H-cyclopenta[3,4]c
1-(Cyclopropyl-nitro-methyl)-cycl	1,13-Tridecanediol, diacetate	1,4-Cyclohexadiene-1-propanoic a	1,4-Cyclohexadiene, 1,3,6-tris(tri	1-Butanol
1,1,1-Trichlorononane	1,16-Dibromohexadecane	1,4-Methanoazulen-7-ol, decahyd	1,4-Diazapine, 2,3-dihydro-6-(4-n	1-Butanol, 3-methyl-, acetate
1,1,3,3-Tetraallyl-1,3-disilacyclob	1,2,4-Benzenetricarboxylic acid, 4	1,4-Phthalazinedione, 2,3-dihydro	1,4-Dioxaspiro[4,5]decane, 7-[(tet	1-Deoxy-d-mannitol
1,1':3',1"-Tercyclopentane, 2'-dode	1,25-Dihydroxyvitamin D3, TMS	1,5,9,9-Tetramethyl-2-oxatricyclo[	1,4-Methanoazulen-9-ol, decahyd	1-Ethyl-12-oxatetracyclo[5.2.1.1(
1,11-Dibromoundecane	1,2-Bis(trimethylsilyl)benzene	1,5-Hexadiene-3,4-diol, 3,4-dimet	1,4-Thiazine, perhydro-1-benzoyli	1H,3H-Pyrano[3,4-c]pyran-5-carb
1,11-Undecanediol, 2TMS derivat	1,2-Butanediol, 1-(2-furyl)-3-meth	1,9-Dioxa-5-thianonane, 3,7-bis(9	1,5,9,9-Tetramethyl-2-oxatricyclo[	1H-imidazole-2-methanol, 1-decyl
1,1-Cyclopropanedicarbonitrile, 2		11,13-Dimethyl-12-tetradecen-1-o	1,6-Hexanediol, 2TMS derivative	
1,1-Cyclopropanedicarboxamide		11-Fluoroundecan-1-ol, TMS deri		
1,1-Dichloro-2-propylcyclopropan		11-Methyl-13-tetradecen-1-ol acet		
1,1-Difluoro-2-vinylcyclopropane		15-Methyl-Z-11-hexadecenal		
1,2,3,10-Tetrahydroestra-10,17-di				

1,2,4-Oxadiazole-5-carboxamide,

1,2,4-Triazol-3-amine, 5-(1,3,5-tri

1,25-Dihydroxyvitamin D3, TMS

1,2-Benzenedimethanethiol, TMS

1,2-Benzenediol, 3,5-bis(1,1-dime

1,2-Bis(trimethylsilyl)-3-methylbe

1,2-Bis(trimethylsilyl)benzene

1,2-Dichloro-4-fluoro-5-nitrobenz

1,3-Benzenedimethanethiol, 2TM

1,3-dicyclohexylpropene

1,3-Dimethyl-3-isobutyldiaziridin

1,3-Dimethyl-4-(tetramethyl-1,3,2

1,3-Dioxolane, 4-ethyl-5-octyl-2,2

1,3-Oxathiane, 5-isopropyl-2-met

1,4-Bis(trimethylsilyl)benzene

1,4-Diaza-4-phenylcyclohexane-1

1,4-Diboracyclohexane, 1,4-dieth

1,4-Dioxaspiro[4.5]deca-6,9-diene

1,4-Piperazinediethanol, .alpha.,.a

1,5,7-Octatrien-3-ol, 2,6-dimethyl

1,5,9,9-Tetramethyl-2-oxatricyclo[

1,5-Bis(pentamethyldisilyloxy)pe

1,5-Cyclooctanediol

1,5-Dimethyl-1-vinyl-4-hexenyl b

1,7-Di(dodec-9-ynyl)-2,2,4,4,6,6-

1,8-Nonadien-3-ol

1.alpha.-(Hydroxymethyl)-7.alpha

1-[1-(Hydroxy-phenyl-methyl)-cyc

1-[2-Deoxy-.beta.-d-erythro-pento

1-[3-(1-Adamantyl)-1-methylprop

1-[N-Aziridyl]-2-methyl-2-propan

10,12-Docasadiyndioic acid

10-12-Pentacosadiynoic acid

10-Undecenoic acid, propyl ester

11-Methyl-13-tetradecen-1-ol acet

11-Methyloctadec-12-enoic acid,

11-Octadecenoic acid, methyl este

12,13-Dioxapentacyclo[5.2.1.1(2,

12-Oxatetracyclo[5.2.1.1(2,6).1(9,

14-Methylhexadec-9-enoic acid, m

14-Octadecenal

16-Trimethylsilyloxy-9-octadecen

18,19-Secolupan-3-ol, (3.beta.,17.

1,2-Cyclohexanedicarboxylic acid

1,2-dihydro-8-hydroxylinalool

1,2-Dihydrolinalool

1,2-ethanediamine, N1-(4-nitroph

1,3-Cyclohexanedione, 2,4,6-trim

1,3-Cyclohexanedione, 5-isopropy

1,3-Dimethyl-4-(tetramethyl-1,3,2

1,3-Dioxolane, 4-ethyl-5-octyl-2,2

1,3-Dithiolane, 2-(28-norurs-12-e

1,4-Benzenediol, 2,5-bis(1,1-dime

1,4-Bis(trimethylsilyl)benzene

1,4-Cyclohexadiene, 1,3,6-tris(tri

1,5,7-Octatrien-3-ol, 2,6-dimethyl

1,5-Anhydro-d-talitol

1,7-Di(dodec-9-ynyl)-2,2,4,4,6,6-

1,9-Nonanediol, 2TMS derivative

1.alpha.-(Hydroxymethyl)-7.alpha

1-[3-Nitro-4-(piperazin-1-yl)phen

10,13-Eicosadienoic acid, methyl

10-Methylene-tricyclo[4.3.1.1(2,5

10-Undecenoic acid, methyl ester

11-(2-Cyclopenten-1-yl)undecano

11-Fluoroundecan-1-ol, TMS deri

13-Trimethylsilyloxy-9-octadecen

14-Oxabicyclo[10.3.0]pentadecan

16-Trimethylsilyloxy-9-octadecen

18-O-Feruloyloxyoctadec-9-enoic

1a-Chloro-2,3-dioxo-6a-phenyloc

1-Aminononadecane, N-trifluoroa

1-Azabicyclo[2.2.2]octane-3-carb

1-Cyclohexanone, 2-(2,4,5-trimeth

1-Heptanol, 2,4-dimethyl-, (R,R)-

1-Heptatriacotanol

1-Heptene, 2,6,6-trimethyl-

1-Hexanol, 4-methyl-, acetate

1-Hexene

1H-imidazole-2-methanol, 1-decyl

1H-indene-5-carboxylic acid, 3-(4

1H-Pyrazol-4-ylmethanamine

18,19-Secolupan-3-ol, (3.beta.,17.

18,19-Secoyohimban-19-oic acid,

1-Aminoheptadecane, N-trifluoroa

1b,5,5,6a-Tetramethyl-octahydro-1

1-Benzazirene-1-carboxylic acid,

1-Bromoeicosane

1-Butanol

1-Chloro-1-n-decyloxy-1-silacycl

1-Cyclohexene-1-butanal, .alpha.,

1-Cyclohexylheptene

1-Hexanethiol, 2-(9-borabicyclo[3

1H-imidazole-2-methanol, 1-decyl

1H-Pyrazole-1-acetic acid, 3-meth

1H-Pyrrolo[2,1-f]purine-2,4(3H,6

1-Naphthalenepropanol, .alpha.-et

1-Phenazinecarboxylic acid, 6-[1-

2-(16-Acetoxy-11-hydroxy-4,8,10

2-(2-Vinyloxy-ethoxy)-cyclohexan

2,2,3,3,4,4-Hexa-t-butyl-1-oxa-2,3

2,2-Difluoroheptacosanoic acid

2,2-Dimethoxybutane

2,3:5,6-Di-O-1-Cyclohexylieden-

2,3-Dihydroxypropyl icosanoate,

2,4,6-Cycloheptatrien-1-one, 3,5-

2,4-Hexadien-1-ol

2,6-Lutidine 3,5-dichloro-4-dodec

2,6-Octadien-1-amine, 3,7-dimeth

2,7-Octadiene-1,6-diol, 2,6-dimet

2-[4-Cyclohexylbutanoylamino]-3

2-Amino-4-hydroxy-6,8-dimethyl-

2-Bromo-5-nitrothiophene

2-Bromolauric acid

2-Bromopropionic acid, 6-ethyl-3-

2-Butanol, 1-benzyloxy-3-methyl-

2-Buten-1-ol, propanoate

2-Cyclopenten-1-one, 2-methyl-3-

2-Ethyl-3-methoxycyclopropaneca

2-Hexenedioic acid, 2,5-dimethyl-

2H-Pyrrol-2-one, 4-acetyl-5-(2-flu

2-Hydroxy-1,1,10-trimethyl-6,9-e

2-Hydroxyethyl palmitate, TMS d

2-Isopropyl-octahydrobenzo[e][1,

2-Methyloctadeca-7,8-diol bis(trif

1,8-Dioxa-5-thiaoctane, 8-(9-bora

1.alpha.-(Hydroxymethyl)-7.alpha

1.alpha.-(Hydroxymethyl)-7.alpha.

1-[(Phenylsulfinyl)methyl]oxirane

1-[n-Dodecyl]aziridine

10-Methylene-tricyclo[4.3.1.1(2,5

11,12-Dibromo-tetradecan-1-ol ac

11-Dehydrocorticosterone

11-Tricosene

14-Oxabicyclo[10.3.0]pentadecan

18,19-Secoyohimban-19-oic acid,

18-O-Feruloyloxyoctadec-9-enoic

1-Allyl-3-methyl-2,4,5-trioxoimid

1-Aminohexadecane, N-heptafluo

1-Cyclohepten-3,6-dione, 2,5,5-tri

1-Cyclohexyl-1-(2-methylenecyclo

1-Dimethyl(pentafluorophenyl)sil

1-Ethynyl-3,trans(1,1-dimetheyleth

1H-1,2,3-Triazole-4-carboxylic ac

1H-3a,7-Methanoazulene, octahyd

1H-Benzimidazole-2-methanol, 1-

1-Heptanol, 7-(octylthio)-

1-Heptene, 2,6,6-trimethyl-

1-Hexene, 1-chloro-, (E)-

1H-imidazole-2-methanol, 1-decyl

1H-Pyrazole, 1-(3-methylbutyl)-5-

1-Octanamine, N-methyl-N-nitros

1-Oxaspiro[2.2]pentane, 5-isoprop

1-Oxaspiro[4.4]non-8-ene-4,7-dio

1-Propanethiol, 2-(9-borabicyclo[

2-(2-Methoxyethyl)-1-hexanol, T

2-(2-Methoxyethyl)hexanol, dime

2-(3-Oxo-2-pentylcyclopentyl)thio

2(5H)-Furanone, 4-butoxy-5-phen

2-(Cyclopropylsulfanyl)-1,3-benz

2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,

2,2,4,4-Tetramethyl-6-(1-oxo-3-ph

2,2,7,9-Tetramethyl-3-oxatricyclo[

1H-Purine-2,6-dione, 7-ethyl-3,7-

1H-Pyrimidine-2,4-dione, 1-(2,3-d

1-Nitro-9,10-dioxo-9,10-dihydro-

1-O-Heptadecylglycerol, bis-trime

1-Pentene, 2,4,4-trimethyl-

1-Phenazinecarboxylic acid, 6-(1-

2-(4-Chlorophenoxy)-N'-(2-propo

2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,

2,2-Dimethoxybutane

2,3-Diazabicyclo[3.2.0]hept-2-ene

2,3-Dihydroxy-6-nitroquinoxaline

2,4(1H,3H)-Pyrimidinedione, 1-[(

2,4(1H,3H)-Pyrimidinedione, 6-a

2,4(3H,5H)-pyrimidinedione, 5-br

2,4,6-Cycloheptatrien-1-one, 3,5-

2,4-Dodecadienoic acid, 11-metho

2,4-Pentadien-1-ol, 3-ethyl-, (2Z)-

2,5,5,8a-Tetramethyl-4-methylene-

2,5-Cyclooctadien-1-ol, acetate

2,6-Lutidine 3,5-dichloro-4-dodec

2,6-Nonadien-1-ol

2,6-Piperidinedione, 1-[(octahydr

2,9-Dioxo-5,5,6,6-decanetetracarb

2-[2-Pyrimidylthio]-5-nitrothiazol

2-[4-Cyclohexylbutanoylamino]-3

2-Adamantanol, 6,6-ethylenedioxy

2-Aminoimidazole-5-propionic ca

2-Benzyl-1-cyclohexyl-3-methyl-i

2-Butanol, 3-methyl-, acetate

2-Chloro-2,5-dimethyl-5-propyl-2

2-Chloro-4,6-dimethyl-5-nitro-nic

2'-Deoxyadenosine, 3TMS derivat

2-Furanone, 3,4-dihydroxytetrahy

2-Heptyn-1-ol

2H-Indeno[1,2-b]oxirene, octahyd

2-Hydroxy-1,1,10-trimethyl-6,9-e

2'-Hydroxypropiophenone, TMS d

2-Iodobenzyl alcohol, 2-methylbu

18-Methyl-nonadecanol, trimethyl

18-O-Feruloyloxyoctadec-9-enoic

1-Aminononadecane, N-trifluoroa

1b,4a-Epoxy-2H-cyclopenta[3,4]c

1b,5,5,6a-Tetramethyl-octahydro-1

1-Benzazirene-1-carboxylic acid,

1-Bromomethylenedecahydronaph

1-Butene, 1,1,2-trichloro-

1-Chloroeicosane

1-Cyclohexen, 1-cyano-4-isoprop

1-Decen-4-yne, 2-nitro-

1-Ethenyl(dimethyl)silyloxynapht

1-Ethyl-3-[2-(octadecylthio)ethyl]

1-Fluorononane

1-Fluorooctane

1H,6H-Triazolo[4,5-E][1,2,3]-ben

1H-1,2,3-Triazole-4-carboxylic ac

1-Heptanol, 2,4-dimethyl-, (R,R)-(

1-Hexanol, 2-ethyl-

1-Hexanol, 6-chloro-

1H-imidazole-2-methanol, 1-decyl

1H-indene-5-carboxylic acid, 3-(4

1H-Isoindole-5-carboxylic acid, 2,

1H-phosphindole, 2,3-dihydro-1,3

1H-Purine-2,6-dione, 7-ethyl-3,7-

1-Hydroxy-4-methoxyiminomethy

1-Methyl-8-propyl-3,6-diazahomo

1-Methylcyclohex-1-en-4-carboxy

1-Monooleoylglycerol, 2TMS der

1-Monopalmitin, 2TMS derivative

1-Naphthalenepropanol, .alpha.-et

1-Oxa-7,8-diazaspiro[4.4]nona-2,

1-Pentanol, 2-methyl-, acetate

1-Tetracosene

1-Vinyladamantane

2-((2R,4aR,8aS)-4a-Methyl-8-met

2-(1,3-Dimethyl-2,6-dioxo-1,2,3,6

2(1H)-Naphthalenone, 3,4,4a,5,6,

2-(1-Methylthiononyl)-5-(5-aceto

2(3H)-Benzofuranone, hexahydro-

2-(3-Methylphenoxy)octahydro-1

2-(4-[2-(4-Methoxymethylphenyl)

2,2,4,4-Tetramethyl-6-(1-oxo-3-ph

1H-Pyrazole, 1-(3-methylbutyl)-5-

1H-Pyrazole-1-acetamide, 4-iodo-

1H-Pyrazole-1-acetamide, N-(2-et

1-Isopropoxy-5-propyl-2,3-bis-tri

1-Methyl-2-trifluoroacetoxycyclo h

1-Octanesulfonyl chloride

1-Octen-3-ol, pentafluoropriona

1-Pentanone, 1-(2-pyridinyl)-

1-Pentanone,1-(1-[hydroxy(pheny

1-Propanone, 1,3-diphenyl-3-(trim

2-(2-Chlorophenoxy)etha nol, n-pe

2(3H)-Furanone, 4,5-dihydro-5-m

2(3H)-Furanone, dihydro-3,3-dim

2-(Benzyloxymethyl)-5-methylfur

2-(Hexyloxy)-N-(trimethylsilyl)be

2,2-Dimethoxybutane

2,2-Diphenyl-N'-veratrylidene-1-c

2,3-Dihydroxypropyl icosanoate,

2,4(1H,3H)-Pyrimidinedione, 1-[(

2,4(1H,3H)-Pyrimidinedione, 6-a

2,4,6-Cycloheptatrien-1-one, 3,5-

2,4-Benzylidene-d-glucose

2,4-Di-tert-butylthiophenol

2,4-Hexadiene, 1,6-dimethoxy-, (E

2,5-Cyclohexadiene-1,4-dione, 3-

2,5-Furandione, dihydro-3-(2-octa

2,6,10-Nonadecatriene, 2,6,10,14-

2,6,6-Trimethyl-bicyclo[3.1.1]hep

2,6-Dihydroxyacetophenone, 2TM

2,6-Dihydroxybenzaldehyde, carb

2,6-Lutidine 3,5-dichloro-4-dodec

2,7-Anhydro-l-galacto-heptulofura

2,7-Diphenyl-1,6-dioxopyridazino

2,7-Octadiene-1,6-diol, 2,6-dimet

2-[(4-Isopropylbenzylidene)hydra

2-[4-Cyclohexylbutanoylamino]-3

2-[5-(2-Methoxy-ethyl)-7-(6-meth

2-Adamantanol, 4,4-ethylenedioxy

2-Aminoimidazole-5-propionic ca

2-Aziridinone, 1-tert-butyl-3-(1-m

2-Myristynoyl-glycinamide

2-Nonadecanone 2,4-dinitropheny

2-Nonenal, 8-oxo-

2-Octenal, (E)-

2-Octene, 1-bromo-1,1,2-trifluoro

2-Pentanol, acetate

2-Propyl-1-pentanol

3,5,9-Trioxa-4-phosphaheptacosan

3,5-Octadiene, 4,5-diethyl-3,6-dim

3.beta.,4.beta.-Bis(trimethylsiloxy

3-Cyclopentylpropionic acid, octy

3-Decenoic acid, (E)-

3-Ethoxy-1,1,1,5,5,5-hexamethyl-

3-Ethyl-6-trifluoroacetoxyoctane

3-Hydroxypropyl palmitate, TMS

3-Methyl-2-ketobutyric acid tbo-t

3-Octanol, 1-bromo-1,1,2,2-tetrafl

3-Octenoic acid, methyl ester, (E)-

3-Octenoic acid, pentadecyl ester

3-trsns-(1,1-dimethylethyl)-4-tran

4(2H)-Pyrrolo[3,4-d][1,2,3]-triazo

4-(Hydroxymethyl)-6-[(thiophen-2

4,4,6a,6b,8a,11,11,14b-Octamethy

4,5-Dibromohex-2-enoic acid, met

4,6-di-tert-Butylresorcinol

4,7,10,13,16,19-Docosahexaenoic

4,9-Decadienoic acid, 2-nitro-, eth

4-[2-(4-Fluorophenyl)ethyl]piperi

4-[4-(2,2-Dimethyl-propionyloxy)

4-Bromobutanoic acid, undecyl es

4-Butyl-5-(3-methylbutyl)-6-(1-m

4-Chloro-2',4'-dimethylbenzophen

4-Decenoic acid, ethyl ester, (Z)-

4-Fluoroanilinomethylenemalonic

4-Hexenoic acid, 6-(acetyloxy)-4-

4-Methylfurazan-3-carboxylic aci

4-Piperidinamine, 1,2,5-trimethyl-

4-tert-Amylphenol, TMS derivativ

4-tert-Butylcyclohexanecarboxylic

5-(2,2-Dioxo[1,2]oxathiolan-5-yl)

5-(4,5-Dihydro-3H-pyrrol-2-ylmet

5-(7a-Isopropenyl-4,5-dimethyl-oc

2,2-Dimethoxybutane

2,2-Dimethylcyclopropanecarboxa

2,4(1H,3H)-Pyrimidinedione, 6-am

2,4,6-Cycloheptatrien-1-one, 3,5-

2,4,6-Cycloheptatrien-1-one, 3,5-b

2,4-Dihydroxyacetophenone, 2TM

2,4-Di-tert-butylthiophenol

2,4-Heptadiene, 5-diethylboryl-2-

2,4-Monoethylidene-l-xylitol

2,5,5,6,8a-Pentamethyl-trans-4a,5,

2,5-Dibora-1,4-dioxane, 2,3,5,6-te

2,6-Lutidine 3,5-dichloro-4-dodec

2,7-dithiatricyclo[4.3.1.0(3,8)]dec

21-O-TFA-prednisolone

29-Nor-8.alpha.,9.beta.,13.alpha.,

2-Azido-2,4,4,6,6-pentamethylhep

2-Benzyloxy-3,5-dibromobenzald

2-Bromolauric acid

2-Butanol, 1-benzyloxy-3-methyl-

2-Butanol, 3-methyl-, acetate

2-Chloro-2,5-dimethyl-5-propyl-2

2'-Deoxyadenosine, 3TMS derivat

2'H-Cholest-2-eno[3,2-c]pyrazole,

2-Hexanone, 3-cyclohexylidene-4

2H-Pyran, 3-bromo-2-ethoxytetrah

2H-Pyran-2-butanoic acid, 6-hepta

2H-Pyran-2-methanol, 3,4-dihydro

2-Monostearin, 2TMS derivative

2-Nitro-4-(trifluoromethyl)phenol

2-Oleoylglycerol, 2TMS derivativ

2-Oxa-7-thiatricyclo[4.4.0.0(3,8)]

2-Pentanol, acetate

2-Propenoic acid, 3-(2,4-dimethox

2-Propyl-5-oxohexanoic acid

3-(1,3-Dihydroxyisopropyl)-1,5,8,

3-(2,3-Dihydro-1,4-benzodioxin-2

3-(2,5-Dimethylanilinomethyl)-5-(

3-(2-Benzyl-benzoimidazol-1-yl)-

2-Isopropyl-octahydrobenzo[e][1,

2-Methyl-1-(1-pyrrolidinyl)-N-sty

2-Methyl-1-ethylpyrrolidine

2-Naphthalenecarboxylic acid, 4,4

2-Nonadecanone 2,4-dinitropheny

2-Octyldecanol, TMS derivative

2-Oxo-2,3-dihydro-benzooxazole-

2-Palmitoylglycerol, 2TMS deriva

2-Pentanol, acetate

2-Pentene, 3-diethylboryl-2-(meth

3-(2-Benzyl-benzoimidazol-1-yl)-

3-(2-tert-Butoxycarbonylamino-4-

3-(3-Methoxy-phenyl)-1,6,8-trime

3,5-Ethanoquinolin-10-one, decah

3,6-Heptadien-2-ol, 2,5,5-trimethy

3,8,11-Trioxatetracyclo[4.4.1.0(2,

3-[2-Aziridylethyl]amino tropane

3-Chloro-2,2-dimethyl-1-propanol

3-Chloropropionic acid, 2-tetrade

3-Cyclohexenecarboxylic acid, 6,6

3-Ethoxy-1,1,1,5,5,5-hexamethyl-

3-Isopropoxy-1,1,1,5,5,5-hexamet

3-Mercapto-3-methyl-1-hexanol

3-Methylbut-2-enoic acid, tetrahy

3-Octene, 2,6-dimethyl-

3-Phenylpropionic acid, oct-3-en-

4,4,4-Trifluoro-3-hydroxy-2-meth

4,4-Bis(dichlorofluoromethyl)-1,2

4-[5-(4-Fluoro-phenyl)-tetrazol-2-

4-[p-Chlorobenzyl]-1-methylpiper

4-Acetyloxyimino-6,6-dimethyl-3-

4-Chloro-6-methoxy-2-methylquin

4H-1,4-Epoxy-4a,7-methanonapht

4-Heneicosanone, 1-cyclopentyl-

4-Hexenoic acid, 6-hydroxy-4-met

4-Hydroxy-5-hydroxyimino-4-(2-i

4-Hydroxybenzoic acid, 2TMS de

4'-Hydroxybutyrophenone semicar

2,2-Dimethoxybutane	2-Bromocaprylic acid	5,14,23-Octadecatrien-14,15-diol	3-(2-Hydroxyethyl)phenol, 2TMS	4-Methyl-2-mercaptopyridine-1-o
2,3,4-Trimethoxyphenylacetonitril	2-Bromolauric acid	5-Chloropentanoic acid, 2-octyl es	3-(3-Methoxyphenyl)propionic ac	4-Methylimidazole-2,5-diethanol
2,3-Dichloro-7-methylenebicyclo[	2-Bromopropionic acid, 2-ethylhe	5-Hexenoic acid, 6-[p-chlorophen	3-(6-Bromohexyl)-2,4,10-trioxaad	4-t-Butylcyclohexyl methylphosph
2,3-Dihydroxybenzoic acid, 3TM	2-Cyclopenten-1-ol, 1-(1-bromo-2	5-Nitro-4-oxo-4,5,6,7-tetrahydrob	3-(Methylthio)hexyl acetate	4-tert-Butylphenol, TMS derivativ
2,3-Dimethoxycinnamic acid, (E)-	2-Ethyl-1-hexanol	5-Octadecanone	3,3'-Isopropylidenebis(1,5,8,11-tet	5-(2-Iodoanilino)-6-(1-pyrrolidiny
2,4(1H,3H)-Pyrimidinedione, 6-a	2-Ethyl-3-methoxycyclopropaneca	6,10-Dimethyl-4-undecanol	3,3'-Methylenebis(1,5,8,11-tetraox	5,6,7-Trimethoxy-1-indanone
2,4,6-Cycloheptatrien-1-one, 3,5-	2-Exo-hydroxy-5-ketobornane	6-Chlorohexanoic acid, TMS deri	3,4-Dimethoxycinnamic acid	5,8,11,14-Eicosatetraynoic acid, T
2,4a,7-Trihydroxy-1-methyl-8-met	2-Furanhexanoic acid, tetrahydro-	6-Dimethylaminomethylene-1-met	3,4-Dimethylbenzoic acid, TBDM	5,8,11-Eicosatrienoic acid, (Z)-, T
2,4-Benzylidene-d-glucose	2H-1,2,3-Triazole-4-carboxylic ac	6-Methyl-2-Heptanol, acetate	3,5-Dinitro-N-[1,2,4]triazol-4-yl-b	5.beta.,6.beta.-Epoxycholest-7-en-
2,4-Di-tert-butylthiophenol	2H-3,9a-Ethanocyclopent[b]oxoci	7,10,13,16-Docosatetraenoic acid,	3,5-Ethanoquinolin-10-one, decah	5-Aziridinopentanol
2,5,6-Trimethyl-1,3-oxathiane	2H-Azepine, 3,4,5,6-tetrahydro-7-	7,7,9,9,11,11-Hexamethyl-3,6,8,1	3.alpha.,4.alpha.,9.beta.,11-Diepo	5-Bromo-2-mercaptopyridine-1-ox
2,5-Cyclohexadiene-1,4-dione, 3-	2-Hepten-4-one, 6-hydroxy-2-met	7-Hydroxy-6,9a-dimethyl-3-methy	3-.beta.-d-Ribofuranosylpyrazolo[	5-Butyl-1,3-oxathiolan-2-one
2,5-Monomethylene-l-rhamnitol	2-Heptene, 1,1-dibromo-1-fluoro-	7-Octenal, 3,7-dimethyl-	3.beta.-Hydroxyguaia-4(15),10(14	5-Fluoro-1-ribofuranosylimidazol
2,6-Dimethyl-3-thioxo-5-oxo-2,3,	2H-Indeno[1,2-b]oxirene, octahyd	8-(4-Fluorophenyl)-1,3,6,7-tetram	3-[p-Chlorophenyl]furazan	5-Nitroimidazole-4-propionic acid
2,6-Lutidine 3,5-dichloro-4-dodec	2H-Pyran-3-acetic acid, 2-(2,4-dic	8,8-Dimethylspiro(4.6)undecane-6	3-Buten-1-ol, 3-methyl-2-methyle	5-Tert-butyl-1,3-oxathiane
2,6-Pyridinedicarboxylic acid, 3-m	2H-Pyrane-5-carboxamide, N-(3,4	8-Azabicyclo[3.2.1]octane-3-carb	3-Chloropropane-1,2-diol, bis(tert	6,2,5-Ethanylylidene-2H-cyclobut
2-[3-(4-tert-Butyl-phenoxy)-2-hyd	2-Hydroxymethylcyclopentanol, (	8-Methyl-6-nonenoic acid	3-Cyclohexene-1,1-dimethanol	6,6,8,8,10,10-Hexamethyl-2,5,7,9,
2-Acetamido-2-deoxy-d-gluconic	2'-Hydroxypropiophenone, TMS d	9,9-Dimethoxybicyclo[3.3.1]nona	3E-Hydroxy-9-thiabicyclo[3.3.1]n	6.beta.,6.beta.-Dibromo-6,7-methy
2-Adamantanone oxime	2-Isopropyl-octahydrobenzo[e][1,	9-[4-Hydroxybutyl]hypoxanthine	3-Ethoxy-1,1,1,5,5,5-hexamethyl-	6.beta.-Hydroxymethandienone, 2
2-Anilino-4,6-di-tert-butylphenol	2-Methoxy-4,6-bis(pyrrolidin-1-yl	9-Bromononaldehyde	3-Isopropoxy-1,1,1,5,5,5-hexamet	6-Hydroxy-7-nonadecylmercapto-6-
2-Butyloxycarbonyloxy-1,1,10-tri	2-Methyl-3-[(1S,2S)-1,3,3-trimeth	9-Hexadecenoic acid, methyl ester	3-Methoxy-2,4,5-trifluorobenzoic	Methoxyphenanthridine
2-Butyne, 1,4-bis(ethylthio)-	2-Methyl-5-t-butyl-1,3-oxathiane	9-Octadecenoic acid (Z)-, 2-hydro	3-Methyl-1-[(1-phenylethyl)carba	6-Methyl-1-(2-thenylidene)furo[3,
2-Chloro-2,5-dimethyl-5-propyl-2	2-Methylene cyclopentanol	9-Oxabicyclo[6.1.0]nonan-4-ol	3-Methyl-2-[4-(3-methyl-butoxy)-	6-Methyl-cyclodec-5-enol
2-Chloroethyl oleate	2-Naphthalenecarboxylic acid, 4,4	9-Undecen-2-one, 6,10-dimethyl-	3-Methyl-4-(phenylthio)-2-prop-2	6-Methyl-cyclohex-2-en-1-ol
2-Cyanobicyclo[3.2.1]octane-6-ca	2-Nitrobenzyl alcohol, heptafluor	Acetamide, N-(4-piperidinylmethy	3-Nonynoic acid	7,7,9,9,11,11-Hexamethyl-3,6,8,17,8-Dioxabicyclo[3.2.1]oct-2-ene
2-Cyclohexene-1-carboxylic acid,	2-Nonenoic acid	Acetate, 2-[(acetyloxy)methyl]-4-[	3-Oxabicyclo[3.3.0]octane-2,7-dio	7-Benzyl-1,3-dimethylpyrido[3,4-
2-Cyclohexenone, 4-acetamido-	2-Octenoic acid	Acetic acid, 4a-methyl-2,3,4,4a,5,	3-trsns-(1,1-dimethylethyl)-4-tran	7-Hydroxy-3-(1,1-dimethylprop-2
2-Ethoxy-1-oxaspiro[4.4]nonane	2-Pentanol, acetate	Acetic acid, butyl ester	4(equaorialt)-Ethenyl-1,2(equatori	7-Hydroxy-7,8,9,10-tetramethyl-7,
2-Ethyl-1-hexanol, pentafluoropro	2-Pentene, 3-(chloroethylboryl)-2-	Acetic acid, pentyl ester	4,4,6a,6b,8a,11,12,14b-Octamethy	8-(Dimethylamino)-7-(3-(4-ethylp
2H-3,9a-Methano-1-benzoxepin, o	2-Pentyl-cyclohexane-1,4-diol	Acetic acid, trifluoro-, [2,3,3a,9a-t	4,5-Dibromohex-2-enoic acid, met	8,11,14-Eicosatrienoic acid, (Z,Z,
2-Heptenoic acid	2-Phenoxy-N-(4H-[1,2,4]triazol-3	Acrylic acid, (1,7,7-trimethyl-2-ne	4,7,14,20-Tetraoxa-1,10-diazabicy	8,11-Octadecadiynoic acid, methy
2H-Indeno[1,2-b]oxirene, octahyd	2-Phenylcarbamoylimino-3-pheny	Adenosine, 1,2-dihydro-2-oxo-	4-Bromo-2,6-difluoroaniline	8,13-Epoxy-labadan-1,6,7,9-tetrao
2'-Hydroxypropiophenone, TMS d	2-Undecene, 6-methyl-, (E)-	Batilol	4-Cyclononen-1-ol	8,8-Difluoro-bicyclo[5.1.0]oct-3-e
2-Isopropenyl-4,4,7a-trimethyl-2,4	3-(1,3-Dihydroxyisopropyl)-1,5,8,	Benz[e]azulene-3,8-dione, 3a,4,6a	4-Cyclooctene-1-carboxaldehyde	8-Methyloctahydrocoumarin
2-Isopropyl-1-(4-nitrophenyl)but-	3-(4-Hydroxy-3-methoxyphenyl)p	Benzene, 1,3-dimethyl-	4H-1,3,4-Triazol-3-amine, N-dime	9,12,15-Octadecatrienoic acid, 2-p
2-Methyl-6-(5-methyl-2-thiazolin-	3-(5,5-Dimethyl-4-methylidene-2-	Benzohydrazide, 4-nitro-N2-(1-tri	4-Methoxy-6-methyl-5-nitroisobe	9-Azatetracyclo[3.3.2.1(3,7).1(8,1
2-Methyl-9-.beta.-d-ribofuranosyl	3-(Aminomethyl)adamantane-1-ca	benzoic acid, 4-[[(trimethylsilyl)o	4-Methyl-2-mercaptopyridine-1-o	
2-Methylbenzo[e][1,3]oxathiane	3,3-Dimethylbutane-2-ol	Bicyclo[3.1.0]hexan-2-ol	4-Oxatricyclo[20.8.0.0(7,16)]triac	
2-methylidene-6,10,14-trimethylp	3,4-Epoxyhexanoic acid, ethyl est	Bicyclo[4.1.0]heptane-7,7-dicarbo	4-Quinolinol,1-ethyl-4-ethynyldec	
2-Myristynoyl-glycinamide	3,5-Dichlorobenzenesulfonyl chlo	Butylphosphonic acid, but-1-yn-3		
2-Octanol, acetate		Carbamic acid, (4-piperidinylmeth		
2-Oleoylglycerol, 2TMS derivativ				
2-Pentanol, acetate				

2-Pentene, 3-(chloroethylboryl)-2-

2-Propen-1-amine, N-2-propenyl-

2-Propenoic acid, 2-benzoyl-3-(ph

2-Propenoic acid, 3-(2,4-dimethox

2-Trimethylsiloxy-6-hexadecenoic

3-(3-Hydroxyphenyl)-3-hydroxypr

3-(4-Hydroxy-3-methoxyphenyl)p

3-(Octane-1-sulfinyl)propanamide

3-(p-Anisidinomethyl)-6-chloro-2

3,3,3-Trifluoro-N-(4-methyl-2-pyr

3,3,5,5,7,7,9,9,11,11,13,13-Dodec

3,3'-Bicyclopentenyl

3,3'-Isopropylidenebis(1,5,8,11-tet

3,3'-Nitro-4,4'-aminodiphenylsulfo

3,4-Altrosan

3,4-Dimethylbenzoic acid, TBDM

3,4-Seco-5.alpha.-cholestan-3-oic

3,5-Dinitro-N-[1,2,4]triazol-4-yl-b

3,6,9,12-Tetraoxatetradecan-1-ol,

3-[2-Aziridylethyl]aminotropane

30-Norlupan-28-oic acid, 3-hydro

3-Amino-2,3-dihydrobenzoic acid

3-Aminobenzoic acid, 2TMS deri

3-Bromo-2-([[(3-bromothien-2-yl)

3-Chloro-2,2-dimethyl-1-propanol

3-Chloro-7-nitro-1-benzothiophen

3-Cyanmethylamino-2-phenyl-thio

3-Dimethyl(trimethylsilylmethyl)s

3-Ethoxy-1,1,1,5,5,5-hexamethyl-

3-Ethyl-5-(4-nitro-1H-pyrazol-1-y

3-Ethylheptanoic acid

3-Hexene, 2,2,5,5-tetramethyl-, (Z

3-Hydroxypropanoic acid, 3-(2,2,6

3-Isopropoxy-1,1,1,5,5,5-hexamet

3-Isoxazolecarboxamide, 4-amino

3-Methoxy-2,4,5-trifluorobenzoic

3-Methoxy-4-nitrobenzyl alcohol,

3-Methyl-4-(phenylthio)-2-prop-2

3-Methyl-4-[3-[1-[2-pyridyl]ethyli

3-Methyl-4-nitro-5-(1-pyrazolyl)p

3-N-Nitroso-solanocapsine

3-Octyn-1-ol

4-(2-Fluorobenzoylamino)piperidi

3,5-Dimethylpiperazine-1-thiocarb

3,6-Methano-1,2,3,4,4a,5,6,8a-oct

3,6-Nonadien-5-one, 2,2,8,8-tetra

3.alpha.,4.alpha.,9.beta.,11-Diepo

3-[4-Azido-5-imidazolyl]propenoi

30-Norlupan-28-oic acid, 3-hydro

3-Buten-2-amine, 4-(2,6,6-trimeth

3-Buten-2-one, 4-(3-hydroxy-6,6-

3-Chloro-5,5-dimethyl-2,4-imidaz

3-Chlropropionic acid, nonyl este

3E-Hydroxy-9-thiabicyclo[3.3.1]n

3-Ethoxy-1,1,1,5,5,5-hexamethyl-

3-Hepten-2-one, O-methyloxime

3H-Pyrazole, 4,5-dihydro-3-(2,2,3

3-Mercapto-3-methyl-1-hexanol

3-Methoxy-2,4,5-trifluorobenzoic

3-Methyl-4-(phenylthio)-2-prop-2

3-Methylgutaconic acid, O,O',O''-t

3-Methylpyrazolobis(diethylboryl

3-Phenylpropanoic acid, dodec-9-

3-Tetradecanynoic acid

4(1H)-Isobenzofuranone, hexahyd

4-(2,3,5,6-Tetramethyl-4-nitrocycl

4,25-Secoobscurinervan-4-ol, 15,1

4,5-Dimethoxy-1-naphthyl dimeth

4,6-di-tert-Butylresorcinol

4,8,12-Trimethyltridec-3-enoic aci

4-[2-Pyrimidyl]piperazine-1-carbo

4a,7,7,10a-Tetramethyldodecahydr

4a,8a-Naphthalenediol, octahydro

4-Amino-1-butanol, 2TBDMS der

4-Amino-2,3,5,6-tetrafluorobenza

4-Aminobenzoic acid, 2TMS deri

4-Bromo-2,6-difluorobenzyl alcoh

4-Cyclononen-1-ol

4-Deoxypyridoxine, 2TMS deriva

4-Ethylthiohexahydropyrimidin-2

4-Fluoro-1-methyl-5-carboxylic ac

4H-1,2,4-triazole-3,5-diamine, N3

Carbonic acid, propargyl 2,2,2-tric

Carvacrol, TBDMS derivative

cis-11,12-Epoxytetradecen-1-ol

Citronellyl butyrate

Cyclobarbital

Cyclododecanecarboxylic acid

Cycloheptanol, pentafluoropropio

Cyclohexane, 1,1-dimethoxy-

Cyclohexane-1,3-dione, 2-allylam

Cyclohexanepropanoic acid, 2-pro

Cyclohexanol, 2-(2-ethylhexyl)-

Cyclohexanol, 2-[(2-hydroxyethyl

Cyclohexanooxazin-2(1H)-one, 3,

Cyclononasiloxane, octadecameth

Cyclooctane-1,4-diol, cis

Cyclooctasiloxane, hexadecameth

Cyclopentane, 1,1'-[3-(2-cyclopen

Cyclopentene-1-carboxylic acid, 4

Cyclopropane, 1,1-dichloro-2,2,3,

Cyclopropanebutanoic acid, 2-[[2-

Cyclopropanol, 1-[2,6-dimethyl-1

Cycloundecanone, oxime

Decane, 3-chloro-

Digitoxin

Diglycolic acid, heptyl octyl ester

Dimethylmalonic acid, cis-4-meth

Dimethylmalonic acid, monochlor

Di-n-decylsulfone

Di-n-octyl phthalate

DISTEARIN

d-Mannitol, 1,1'-O-1,16-hexadeca

d-Mannitol, 1-decylsulfonyl-

d-Mannitol, 1-O-(16-hydroxyhexa

d-Mannose

Dodecahydropyrido[1,2-b]isoquin

Dodecane, 1,12-dibromo-

Dodecane, 4-cyclohexyl-

E-2-Methyl-3-tetradecen-1-ol acet

E-8-Methyl-7-dodecen-1-ol acetat

Eicosanoic acid, 15-oxo-, methyl e

Eicosanoic acid, 2-[(1-oxohexade

Eicosanoic acid, 9-octadecenyl est

erythro-7,8-Bromochlorodisparlur

4-Sulfamoyl-thiophene-2-carboxy

5-(4-Chlorophenyl)-2-methyl-N-(1

5,14,23-Octadecatrien-14,15-diol

5,5,10,10-Tetrachlorotricyclo[7.1.

5,7a-Didehydroindicinepertrimeth

5-Bromo-4-nitroimidazole-2-[2-th

5-Ethyl-3-(5-nitro-furan-2-yl)-[1,2

5-Fluoro-3-trifluoromethylbenzoic

5-Hepten-2-one, 6-methyl-

6,7-Dimethoxy-2H-1,3-benzodiox

6-Bromo-1-methyl-2-oxoquinolin

6-Cyanomethoxy-N-methoxymeth

6-Ethoxypurine, TMS derivative

6-Methyl-5-pentyl-2-(pyrrolidin-1

7,7,9,9,11,11-Hexamethyl-3,6,8,1

7H-Purin-6-amine, 7-methyl-

7-Oxatetracyclo[7.3.0.0(2,6).0(4,9

7-Tetradecenal, (Z)-

8-Heptadecene, 8-methyl-, (E)-

8-Tetradecen-1-ol acetate

9,12-Tetradecadien-1-ol, acetate, (

9,19-Cyclolanostan-3-ol, acetate,

9-Acetoxynonanal

9-Azabicyclo[3.3.1]nonan-3-one,

9-Borabicyclo[3.3.1]nonane, 9-eth

9-Borabicyclo[3.3.1]nonane, 9-me

9-Decen-1-yl acetate

Acetamide, N-(1-methyl-3-phenylp

Acetamide, N-5.alpha.-androst-2-e

Acetamide, N-methyl-N-[4-[4-[2-h

Acetic acid, 10-chlorodecyl ester

Acetic acid, 17-acetoxy-4,4,10,13-

Acetic acid, 3-(5,5-dimethyl-spiro

Acetic acid, bis[(trimethylsilyl)ox

Acetic acid, butyl ester

Acetic acid, pentyl ester

Acetic acid, trichloro-, nonyl ester

Acetic acid, trifluoro-, [2,3,3a,9a-t

Adipic acid, dec-4-enyl dodecyl es

Alanine, N-[(3-methoxy-2-pyridin

9-Borabicyclo[3.3.1]nonane, 9-me

9-Hexadecenoic acid, methyl ester

9-Octadecen-12-ynoic acid, methy

9-Oxabicyclo[6.1.0]nonan-4-ol

9-Tetradecenoic acid, (E)-, TMS d

Acetamide, N-(4,8-dioxotricyclo[3

Acethydrazide, 2-(2-nitrophenoxy

Acetic acid, 2,2'-sulfonylbis-, dim

Acetic acid, 3-cyano-2-cyclohexyl

Acetic acid, butyl ester

Acetic acid, chloro-, 1-methylhept

Acetic acid, pentyl ester

Alpha,alpha,alpha-trifluoro-4'-nitr

Arachidonic amide, N-[5-hydroxy-

Arsenous acid, tris(trimethylsilyl)

Arteannuin b

Aziridinone, 1-(1,1-dimethylethyl)

Benzaldehyde, 2-nitro-4-trimethyl

Benzenamine, 2-(cyclopropylmeth

benzene, 1,3-dibromo-5-nitro-

Benzene, 1,3-dimethyl-

Benzene, 1,4-dichloro-2-nitro-

Benzeneacetonitrile, 3,4,5-trimeth

Benzestrol, 2TMS derivative

benzoic acid, 3-formyl-5-methyl-,

Benzoic acid, 4-(1,3-dioxolan-2-y

benzoic acid, 4-[[(trimethylsilyl)o

Bicyclo[2.2.1]heptane-1-carboxyli

Bicyclo[3.3.0]octan-2-ol, 7-oxo-

Bis(carboxymethyl) trithiocarbona

Boron, [.mu.-(3,5-dimethyl-1H-py

But-3-en-1-ynyl methyl sulfide

Butyl 4-((tert-butyldimethylsilyl)o

Butyl 4-[(trimethylsilyl)amino]ben

Butyl 9-hexadecenoate

Carbonic acid, allyl decyl ester

Carbonic acid, but-3-yn-1-yl nony

Carbonic acid, ethyl isohexyl este

Carbonic acid, propargyl 2,2,2-tric

Carvacrol, TMS derivative

Chalcone

Chloroacetic acid, 2-methylpentyl

4-(2-Hydroxyethyl)-2-phenyl-1,3-

4-(2-Methoxyphenyl)piperidine

4-(3-Pyridyl-tetrahydrofuran-2-on

4(equaorialt)-Ethenyl-1,2(equatori

4-(Hydroxymethyl)-6-[(thiophen-2

4,4,6a,6b,8a,11,11,14b-Octamethy

4,4,6a,6b,8a,11,12,14b-Octamethy

4,4-Bis(dichlorofluoromethyl)-1,2

4,6-Dioxa-3,8-disiladecane, 5-(2,6

4,8,12-Trimethyltridec-3-enoic aci

4-[p-Fluorophenyl]-2H-1,3[3H]-o

4-Allyl-5-furan-2-yl-2,4-dihydro-[

4-Chlorobutyric acid, pentadecyl e

4-Decanol

4-Dehydroxy-N-(4,5-methylenedi

4-Deoxypyridoxine, 2TMS deriva

4-Fluoro-1-methyl-5-carboxylic ac

4H-1-benzopyran, 4,4'-oxybis[2-p

4-Hexenoic acid, 6-hydroxy-4-met

4-Hydroxy-4-(2-methylcyclohex-3

4-Hydroxy-5-hydroxyimino-4-(2-i

4-Hydroxybenzeneacetic acid, 2T

4-Hydroxybenzoic acid, 2TMS de

4-Isopropyl-2,6,7-trioxa-1-phosph

4-Methoxy-6-methyl-5-nitroisobe

4-Methyl-2-mercaptopyridine-1-o

4-Octadecenoic acid, methyl ester

4-Oxo-2-(3,4,5-trimethoxyphenyl)

4-Oxopentanoic acid, p-tolylsulfo

4-Phenyltetrahydro-1,3-oxazine-2

4-Piperidineacetic acid, 1-acetyl-5

4-Pyridinol-3,5-dichloro-2,6-dime

4-tert-Butylphenol, TMS derivativ

4-Thiepanone, 5-hydroxy-3,3,6,6-

5-(4,5-Dihydro-3H-pyrrol-2-ylmet

5-(7a-Isopropenyl-4,5-dimethyl-oc

5,5,10,10-Tetrachlorotricyclo[7.1.

5,6,7-Trimethoxy-1-indanone

5,7a-Didehydroindicine pertrimeth

5-Acetamido-4,7-dioxo-4,7-dihyd

5-Amino-1-benzoyl-1H-pyrazole-3

5-benzofuranol, 2-ethoxy-2,3-dihy

5-Bromo-8-(5-nitrosalicylideneam

4-Heptanol, 3-methyl-

4-Hexenoic acid, 6-hydroxy-4-met

4-Hydroxy-4-(2-methylcyclohexyl

4-Iodohistidine, methyl ester

4-Methylimidazole-2,5-diethanol

4-Methylnonanoic acid

4-O-Methyl-2,3-O-benzal-d-mann

4-Piperidinol, 4-ethynyl-1-methyl

4-tert-Butylphenol, TMS derivativ

5-(7a-Isopropenyl-4,5-dimethyl-oc

5,14,23-Octadecatrien-14,15-diol

5,5-Diethyl-3,3-dimethyl-6-pheny

5,5-Dimethyl-cyclohex-3-en-1-ol

5,6-Azulenedimethanol, 1,2,3,3a,8

5-Chlorovaleric acid

5H-Cyclohepta-1,4-dioxin, 2,3,4a,

5-Isoxazolol, 3-(2-furanyl)-4,5-dih

5'-Methyl-[2,2']bithiophenyl-5-car

5-Octen-2-ol, 5-methyl-

6-(1'-Oxo-2'-propenyl)-1,3-cis,cis-

6-(2-Chloroethoxy)-N-cyano-N',N

6,9,12-Octadecatrien-1-ol

6.beta.-Hydroxymethandienone, 2

6-Acetyl-.beta.-d-mannose

6-Amino-4,7-Dimethoxy-2H-1,3-b

6-Amino-5-cyano-4-(3-iodo-phen

6-Azaspiro[2.5]octa-4,7-diene-6-c

6-Bromohexanoic acid, butyl ester

6-Bromohexanoic acid, octyl ester

6-Epishyobunone

6-Methoxypurine, TBDMS deriva

6-Methyl-1-(2-thenylidene)furo[3,

6-Octadecenoic acid, methyl ester

7,7-Dibutoxyheptanoic acid, butyl

7-[.beta.-d-Ribofuranosyl]imidazo

7-Chloro-3-nitroquinoline

7-Hydroxy-3-(1,1-dimethylprop-2

7-Hydroxy-6,9a-dimethyl-3-methy

7-Methoxy-1-methyl-6-oxo-N-(pr

7-Methoxyheptan-1-ol, TMS deriv

7-Oxabicyclo[4.1.0]heptane

Ethane, 1-(4,4,4-trifluoro-1,3-dith

Ethanethioic acid, S-[8-(diethylph

Ethyl geranyl acetate

Ethyl homovanillate, TMS derivat

Ethyl Oleate

Ethyl-1-thio-.beta.-d-glucopyrano

Ethylbenzene

Farnesol, TMS derivative

Fumaric acid, pentafluorophenyl t

Furo[2',3':4,5]thiazolo[3,2-g]purin

Ginsenol

Gorgost-5-en-3-ol, (3.beta.)-, TMS

Guanidine, 1-(4-methyl-1-piperazi

Heneicosane, 11-(1-ethylpropyl)-

Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,

Hexadecanoic acid, 2-hydroxy-1,3

Hexahydropyridine, 1-methyl-4-[4

Hexane, 3,3,4-trimethyl-

Hexanoic acid, 2,7-dimethyloct-7-

Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,

i-Propyl 9-tetradecenoate

Isobutyraldehyde, bis(2-methylall

Isolongifolan-8-ol

Isooctyl mercaptoacetate

l-Alanyl-d-histidine

l-Gala-l-ido-octose

Mercaptoethanol, 2TMS derivativ

Methanone, (2,4-dimethylphenyl)(

Methoprene

Methyl 10-methoxycarbonyl-17-o

Methyl 12,13-tetradecadienoate

Methyl 17-acetoxyoctadecanoate

Methyl 3,4,6-tri-O-acetyl-2-O-met

Methyl E-11-tetradecenoate

Milbemycin B, 5-O-demethyl-28-

N,N'-(Pentamethylenebis(oxy-p-p

Nandrolone, TMS derivative

n-Heptadecan-1,2-diol,bis-(trimet

N-Oleoyl-L-glycine,trimethylsilyl

Nonane, 3,7-dimethyl-

Nonanoyl chloride

n-PROPYL NONYL ETHER

Octadecanoic acid, butyl ester

Aminoacetamide, N-methyl-N-[4-(

Androstan-17-one, 3-(acetyloxy)-1

Androstan-17-one, 3,11-bis[(trime

Anthracene, 9,10-dihydro-9,9,10-t

Arsenous acid, tris(trimethylsilyl)

Benz[e]azulene-3,8-dione, 5-[(ace

Benzazepin-1-one, 1,2,3,4-tetrahy

Benzenamine, 4-(2-phenylethenyl

benzenamine, N,2,3,5,6-pentameth

Benzene, 1,3-dimethyl-

Benzenepropanoic acid, TBDMS

Benzestrol, 2TMS derivative

benzoic acid, 3,5-dimethyl-, trimet

benzoic acid, 4-[[(trimethylsilyl)o

Benzyl trans-4-coumarate

Bicyclo[3.1.1]heptane-2-carboxal

Bicyclo[3.2.0]hepta-2,6-diene, 5-

Bicyclo[3.2.1]octan-4-one, 2-(4-m

Bicyclo[4.1.0]heptan-2-ol, (1.alph

Bicyclo[4.1.0]heptane-7-carboxam

Butanoic acid, 3-methyl-, heptyl e

Butanoic acid, 3-methyl-, hexyl es

Caprolactone oxime, (NB)-O-[(die

CAPS

Carbonic acid, but-3-yn-1-yl hepta

Carbonic acid, butyl decyl ester

Carbonic acid, butyl undec-10-eny

Carvacrol, TBDMS derivative

Carvacrol, TMS derivative

Chalcone

Chloroacetic acid, heptyl ester

cis-2-Ethylcyclopentanecarboxald

Cis-4-methylcyclohexanol, dimeth

Cyclobarbital

Cyclohexa-2,5-diene-1,4-dione, 2

Cyclohexane, (1-butylhexadecyl)-

Cyclohexane, 1,1-dimethoxy-

Cyclohexane, 1,4-didecyl-

Cyclohexane, 1,4-dimethoxy-2-me

Cyclohexane-1,3-dione, 2-allylam

Cyclohexanemethanol, 1,6-dimeth

Cyclohexanepropanoic acid, 2-pro

Cyclohexanol, 5-methyl-2-(1-meth

Chloroneb

Cholest-5-en-3-ol, (3.alpha.)-, TM

cis-1,4-Cyclohexanediamine, N-m

cis-2-Methyl-4-n-pentylthiane, S,

Cyclobarbital

Cycloheptasiloxane, tetradecamet

Cyclohexane, 1,1-dimethoxy-

Cyclohexanecarboxylic acid

Cyclohexanone, 2,6-bis(2-methylp

Cyclohexanone, 3-(hydroxymethy

Cyclohexanone, 3-ethylidene-2,2,

Cyclohexanone, 6-methyl-3-(1-me

Cyclopentanecarboxylic acid, 3-m

Cyclopentene, 3,3-dimethyl-4-met

Cyclopropanedecanoic acid, 2-hex

Cyclotetrasiloxane, octamethyl-

Cyclotrisiloxane, hexamethyl-

Cystathionine, 2TMS derivative

Dasycarpidan-1-methanol, acetate

Decan-2-yl ethyl carbonate

D-Galactose, diethyl mercaptal, pe

d-Galactose, diheptyl mercaptal

Dimethylmalonic acid, 2-fluoro-3-

Di-n-octyl phthalate

DISTEARIN

Distearyl thiodipropionate

d-Lyxo-d-manno-nononic-1,4-lact

d-Mannitol, 1-decylsulfonyl-

d-Mannitol, 1-O-heptyl-

Dodecane, 1-chloro-

D-Streptamine, O-2-amino-2-deox

E-2-Methyl-3-tetradecen-1-ol acet

endo-2-Aminonorbornane

Ergostane-3,5,6,12,25-pentol, 25-

Ergotaman-3',6',18-trione, 12'-hyd

Ethanone, 1-(2,2-dimethylcyclope

Ethanone, 2-azido-1-(4-methyl-3-f

Ethyl 1-thio-.alpha.-d-arabinofura

Ethyl 4-bromo-3-ethoxy-but-2-eno

Ethyl homovanillate, TMS derivat

Ethylbenzene

exo-Norborneol, pentafluoropropi

5-Butyl-1,3-oxathiolan-2-one

5-Chlorovaleric acid, undecyl este

5-Ethoxy-cyclooctene

5H-Cyclohepta-1,4-dioxin, 2,3,4a,

5-Methoxy-cyclooctene

6-Acetyl-.beta.-d-mannose

6-Amino-2-(3-methylpiperidin-1-y

6-Chlorohexanoic acid, 2,2,2-trich

6-Chlorohexanoic acid, TMS deri

6-Ethoxypurine, TMS derivative

6-Ethyl-3-(1-methylethyl)tetrahyd

6-Exo-chlorobicyclo[3.2.0]heptan

6H-Furo[2',3':4,5]oxazolo[3,2-a]p

6-Methoxy-2-phenyl-hexahydropy

6-Methyl-2-Heptanol, acetate

6-Methyl-7-methoxypyrimido[5,4

6-Octadecenoic acid, methyl ester,

6-Phenoxy-1-hexanol, TMS deriva

6-Undecen-3-one, 5-butyl-2,2-dim

7-(3,5-Diacetoxy-cyclopent-1-eny

7,15-Dihydroxydehydroabietic aci

7,7,9,9,11,11-Hexamethyl-3,6,8,1

7,7-Dimethyl-(5Z,8Z)-eicosadieno

7-Decen-1-ol acetate

7-Hexadecyn-1-ol

7-Hydroxy-bicyclo[3.3.1]non-2-en

8,11,14-Eicosatrienoic acid, (Z,Z,

8,11,14-Eicosatrienoic acid, meth

8-Dodecenoic acid, 11-hydroxy-,

8-Methyl-6-nonenoic acid

9(1H)-Phenanthrone, 2,3,4,4a,4b,

9-(2',2'-Dimethylpropanoilhydrazo

9,10-Secochola-5,7,10(19)-trien-2

9,10-Secocholesta-5,7,10(19)-trie

9,11-Dodecadien-1-ol, acetate, (Z)

9-[2-Deoxy-.beta.-d-ribohexopyra

9-Borabicyclo[3.3.1]nonane, 9-(3-

9-Bromononaldehyde

9-Bromononanoic acid

9-Cycloheptadecen-1-one, (Z)-

9-Octadecen-1-ol, acetate, (Z)-

9-Octadecene, 1-[3-(octadecyloxy

9-Oxononanoic acid

8,11-Octadecadiynoic acid, methy

8-Heptadecene, 1-chloro-

8-Pentadecanone

9,10-Secocholesta-5,7,10(19)-trie

9,12-Octadecadienoic acid (Z,Z)-,

9,12-Octadecadienoic acid, (2-phe

9,12-Tetradecadien-1-ol, (Z,E)-, T

9-Borabicyclo[3.3.1]nonane, 9-pip

9H-Purine-9-propanoic acid, 6-hy

9-Methyltricyclo[4.2.1.1(2,5)]dec

9-Octadecen-12-ynoic acid, methy

9-Octadecenoic acid (Z)-, methyl

9-Octadecenoic acid, 2-phenyl-1,3

9-Octadecenoic acid, methyl ester,

9-Oxabicyclo[6.1.0]nonan-4-ol

9-Oxabicyclo[6.1.0]nonan-4-one

9-Tetradecenoic acid, (E)-, TMS d

Acetamide, N-(2-piperidin-4-yleth

Acetamide, N-methyl-N-(4-(1-pyrr

Acetamide, N-methyl-N-[4-[4-[2-h

acetic acid, 2,2,2-trifluoro-, 2-met

Acetic acid, butyl ester

Acetic acid, chloro-, decyl ester

Acetic acid, chloro-, pentyl ester

Acetic acid, octyl ester

Acetoxyacetic acid, nonyl ester

Adamantan-2-one-1-carboxylic aci

Aminoacetamide, N-methyl-N-[4-(

Arachidonic amide, N-[5-hydroxy-

Arachidonic amide, N-n-propyl-

Arsenic acid tripentyl ester

Arsenous acid, tris(trimethylsilyl)

Azelaic acid

Aziridine, 2-methyl-2-(2,2,4,4,6,6

Barbituric acid, 5-allyl-5-(cyclohe

Batyl alcohol, 2TMS derivative

Benzenamide, N-cyano-3,4,5-trim

Benzene, [(2-chlorohexyl)sulfonyl

Benzene, 1,3-dimethyl-

Benzeneacetaldehyde, .alpha.-(phe

Benzeneacetic acid, .alpha.-[(2,4-d

Octane

Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1

Oleic Acid, (Z)-, TMS derivative

Oxalic acid, monoamide, N-(2-flu

Patchouli alcohol

p-Dihydroartemisininoxymethylbe

Pentadioic acid, dihydrazide, N2,

Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-

Pentasiloxane, dodecamethyl-

Perhydro-htx-2-one, 2-depentyl-,

Phenylacetic acid, 2-(1-adamantyl

p-Mentha-6,8-dien-2-one, semicar

p-Menthane-1,3-diol

Pregn-5-en-20-one, 11-(acetyloxy)

Prop-2-enoic acid, 2-cyano-3-(3-m

Propanenitrile, 3-(5-diethylamino-

Propanoic acid, 2-methyl-3-(3-met

Pseduosarsasapogenin-5,20-dien

Pterin-6-carboxylic acid

Pyrazolo[5,1-c][1,2,4]triazine-3-c

Retinal

Sebacic acid, 2,2-dichloroethyl he

Silane, chlorodiethylheptyloxy-

Silane, dimethyl(3-phenylprop-2-e

silane, trimethyl[[2-(tetradecylthio

Spiro[bicyclo[3.1.1]heptane-2,2'-o

Spirost-8-en-11-one, 3-hydroxy-,

Stearic acid, 3-(octadecyloxy)prop

Succinic acid, 3-methylbut-2-yl do

Succinic acid, hept-2-yl dodec-9-y

tert-Butyl (2-aminophenyl)carbam

tert-Butyldimethylsilyl 2,3-dimeth

Tetradecanoic acid, 2-phenyl-1,3-d

Tetraponerine T8

Tetrasiloxane, 1,1,3,3,5,5,7,7-octa

Tetrasiloxane, decamethyl-

Thiirane, octyl-

Thymol, TBDMS derivative

trans-7a-Ethoxycarbonyl-8-metho

trans-Z-.alpha.-Bisabolene epoxid

Triarachine

Trichloroacetic acid, decyl ester

Trichothec-9-en-8-one, 12,13-epo

Cyclohexanone, 2-methyl-, O-met

Cyclohexanone, 4-(1,1-dimethylet

Cyclohexanone, O-methyloxime

Cyclooctane

Cyclopentene, 3,3-dimethyl-4-met

Cyclopropane, 1-(1'-propenyl)-2-h

Cyclopropaneacetic acid, 2-hexyl-

Cyclopropanecarboxylic acid, 2,2,

Cyclopropene-3-carboxylic acid, 1

Cyclotetrasiloxane, octamethyl-

Cyclotrisiloxane, hexamethyl-

Decaborane(14)

Dicyclohexano-24-crown-8

Diethylmalonic acid, decyl 3-meth

Di-n-decylsulfone

Di-n-octyl phthalate

Disiloxane, 1,3-diethoxy-1,1,3,3-t

DISTEARIN

d-Mannitol, 1-decylsulfonyl-

d-Mannitol, 1-O-(22-hydroxydoco

Doconexent, TMS derivative

Dodecahydropyrido[1,2-b]isoquin

Edulan II

Ethanethioic acid, S-[8-(diethylph

Ethanone, 1-[2,3-dihydro-6-hydro

Ethanone, 1-[4-methyl-2-[(trimeth

Ethyl 2-acetamido-1,2-dideoxy-1-

Ethyl cyclobutanecarboxylate

Ethyl homovanillate, TMS derivat

Ethylbenzene

Fumaric acid, 2-chloropropyl dod

Furazano[3,4-b]pyrazin-5(4H)-one

Heptadecanoic acid, 7-iodo-, meth

Heptane, 2,4-dimethyl-

Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,

Heptasiloxane, hexadecamethyl-

Hexadecanoic acid, 1a,2,5,5a,6,9,

Hexadecanoic acid, 2-methoxy-5,6

Hexadecanoic acid, 2-phenyl-1,3-

Hexane, 2,2,5-trimethyl-

Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,

Hexestrol, 2TMS derivative

Hydratropic acid, oct-3-en-2-yl est

Fumaric acid, 2-chloroethyl octyl

Ginsenol

Gorgost-5-en-3-ol, (3.beta.)-, TMS

Heptane

Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,

Heptasiloxane, hexadecamethyl-

Hexahydropyridine, 1-acetyl-4-[4-

Hexahydropyridine, 1-methyl-4-[4

Hexanoic acid, 3-(2,2,3,3-tetramet

Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,

Hexasiloxane, tetradecamethyl-

Hexestrol, 2TMS derivative

Hippuric acid, TMS derivative

Isothiourea, 2-benzyl-1-tert-butyl-

Isovanillic acid, 2TBDMS derivati

l-Gala-l-ido-octose

Lupeol

L-Valine, N-[2-(chloroimino)-3-m

Malonic acid, decyl 2,2-dichloroe

Methanone, cyclopropyl-4-pyridin

Methyl 2,4-tridecadiynoate

Methyl 3-bromo-1-adamantaneace

Methyl 3-bromo-1H-1,2,4-triazole

Methyl 3-O-mesyl-5-O-methoxyca

Methyl 4-methyl-4-(diethylphosph

Methyl 5,12-octadecadienoate

Methyl 5-cyclopropyl-1-(4-fluoro

Methyl 5-eicosenoate

Methyl 6,9,12-hexadecatrienoate

Methyltris(trimethylsiloxy)silane

Mucochloric acid

N.alpha.-[N-(tert-butoxycarbonyl)

N-[3-(Cyano-dimethyl-methyl)-1-

Naphthalene, 2-bromo-6-methoxy

Naphthalene, 6-chloro-1-nitro-

Naphthalene, decahydro-1,4a-dim

N-Benzylmaleimide

n-Heptyl hexanoate

N-Methyl-1-adamantaneacetamide

N-Trifluoroacetyl-3-methoxytyram

Octadecanenitrile

Octadecanoic acid, 9,10-epoxy-18

Acetamide, 2,2,2-trifluoro-N-(1-m
Acetamide, N-(4,8-dioxotricyclo[3
Acetamide, N-(4-bromophenyl)-2-
Acetamide, N-(4-fluorophenyl)-2,
Acetamide, N-(4-hydroxycyclohex
Acetamide, N-(6-acetylaminobenz
Acethydrazide, 2-tert-butylamino-
Acetic acid, 3-cyano-2-cyclohexyl
Acetic acid, butyl ester
Acetic acid, chloro-, isobutyl ester
Acetohexamide
Acetoxyacetic acid, 2,7-dimethylo
Acetoxyacetic acid, nonyl ester
Acrylic acid, (1,7,7-trimethyl-2-ne
Adenosine, 4'-methylaminoformyl-
Alanine, N-[(3-methoxy-2-pyridin
Azuleno[4,5-b]furan-2(3H)-one, d
Benz[d]isoxazol-4(5H)-one, 6,7-d
Benz[e]azulene-3,8-dione, 5-[(ace
Benzene, [(1,2-dimethyl-1-propen
Benzene, 1,3-dimethyl-
Benzenebutanoic acid, ethyl ester
Benzeneethanamine, 3-isothiocya
Benzenemethanol, .alpha.-1-prope
Benzenesulfonic acid p-fluoro, 3,5
Benzenethanamine, N-acetyl-3-flu
Benzo[b]perhydroazonine-2,7-dio
Benzocycloheptano[2,3,4-l,j]isoqu
Benzofuran, 7-(2,4-dinitrophenox
Benzoic acid, 2,3,6-trichloro-
Benzoic acid, 2,4-dinitro-, bicyclo
Benzoic acid, 2-hydroxy-5-(4-met
Benzoic acid, 4-(1,3-dioxolan-2-y
Benzoic acid, 4-(1-hydroxy-3-phe
Benzylidene iditol
Benzyloxy(triisobutyl)silane
Bicyclo[10.1.0]trideca-4,8-diene-1
Bicyclo[2.2.1]heptane, 2-methoxy
Bicyclo[3.1.0]hexan-2-ol
Butanamide, N-formyl-2-hydroxy-
Butane, 1,2,3-trimethoxy-4-pheny
Butyl 9,12,15-octadecatrienoate
Butyric acid, 3-amino-4-methoxy
Benzeneacetic acid, 4-nitro-, oct-3
Benzenemethanol, .alpha.-1-prope
benzenesulfonamide, 3-chloro-2-h
Benzestrol, 2TMS derivative
Benzoic acid, 4-(1,3-dioxan-2-yl)-
benzoic acid, 4-[[(trimethylsilyl)o
Benzoic acid, 4-methyl-2-trimethy
Bicyclo[2.2.1]heptan-2-ol, 1,2-di
Bicyclo[2.2.1]heptane-2-acetic aci
Bicyclo[2.2.1]heptane-2-carboxyli
Bicyclo[2.2.2]octane-2-carboxylic
Bicyclo[4.1.0]heptan-2-ol, 3,7,7-t
Bicyclo[4.2.0]oct-1-ene, exo-7-(1,
Bicyclo[8.2.0]dodecan-11-one, 12
bis(Hex-5-en-1-yloxy)(dimethyl)si
Boroxin, tributyl-
Butanoic acid, 2-methyl-, octyl est
Carbamic acid, (1-phenylethyl)-, 2
Carbonic acid, but-2-yn-1-yl isobu
Carbonic acid, but-2-yn-1-yl octad
Carvacrol, TBDMS derivative
Carvone oxide, trans-
Chloromethyl 8-chlorononanoate
Cholest-5-en-3-ol (3.beta.)-, carbo
Cholest-5-en-3-ol, (3.alpha.)-, TM
Cholesta-5,17(20)-dien-3-ol, aceta
Cholesta-9(11),20(22)-diene-3,23
Cinnamic acid, 4-methoxy-3-(trim
cis,trans-5,9-Cyclododecadiene-ci
cis-3-Nonen-1-ol, pentafluoroprop
cis-4-Hydroxycyclohexane carboxy
cis-9-Hexadecenoic acid, isobutyl
cis-9-Octadecenoic acid, propyl es
cis-p-mentha-1(7),8-dien-2-ol
Colchicine, N-desacetyl-N-[4-hyd
Coumarin, 7,8-dihydro-7-hydroxy
Cyclandelate
Cyclobarbital
Cyclobutane, 1,3-bis[2-(2-isoprop
Cyclododecanol, 1-ethenyl-
Cyclododecanone, 2-methylene-
Cycloheptanecarboxylic acid
Cyclohexa-2,5-diene-1,4-dione, 2
Tricosanoic acid
Tricosanoic acid, isopropyl ester
Tricyclo[4.3.0.0(3,8)]nonan-2-ol,
Trimethylsilyl 3-methyl-4-[(trimet
Tris(tert-butyldimethylsilyloxy)ars
Undec-10-ynoic acid, heptyl ester
Undec-10-ynoic acid, isobutyl est
Undecane, 2,8-dimethyl-
Undecanoic acid, 11-fluoro-, trime
Urea, N-(4,5-dihydro-5-methyl-2-t
Urea, N-[5-(ethylsulfonyl)-1,3,4-t
Z,Z-2,5-Pentadecadien-1-ol
Z,Z-6,28-Heptatriactontadien-2-o
Z-8-Methyl-9-tetradecen-1-ol acet
Hydroperoxide, 1-ethylbutyl
Hydroquinone, 2TBDMS derivati
Imidazole-2-[3-thiopropionic acid
l-Methionine, N-(2-chloroethoxyc
l-Methionine, N-(5-chlorovaleryl)
L-Tyrosine, 3-nitro-
Lupeol
Methanone, (2,4-dimethylphenyl)(
Methyl 2-bromo-hexadecanoate
Methyl 2-octylcyclopropene-1-oct
Methyl 3-bromo-1-adamantaneace
Monobenzylidene-d-glucose
N-(2,6-Dimethyl-phenyl)-2-(2-met
N-.alpha.-Heptafluorobutyryl-N-te
N-Acetyl-L-methionine methyl est
N-Acetylmannosamine
N-Methyl-1-adamantaneacetamide
n-Octylidencyclohexane
N-Phenethylidene-2-butylamine
Octadecane, 1,1'-[1,3-propanediyl
Octadecanoic acid, 15-oxo-, meth
Octadecanoic acid, 16-oxo-, meth
Octadecanoic acid, 2,3-dihydroxy
Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1
Oxetane, 3,3-dimethyl-
Oxirane, 2,2'-(1,4-butanediyl)bis-
Oxirane, tetradecyl-
o-Xylene
Pentanoic acid, 3-methyl-4-oxo-
Pentanoic acid, 5-methoxy-, phen
Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-
Pentasiloxane, dodecamethyl-
Perhydro-htx, 1-acetyl-, acetate(es
Phenol, 2-(4-fluorophenyliminom
Phenylacetic acid, 2-(1-adamantyl
Phenylethynyl p-methoxyphenyl k
Phosphinous chloride, bis(2,2-dim
Piperazine, 1-(2-fluorophenyl)-4-[
Piperazine, 1-[5-fluoropentyl]-4-[(
Pregnane-3,20-dione, 16-methylen
Propanoic acid, 3-hydroxy-3-phen
Octane
Octane, 1,1'-oxybis-
Octanenitrile
Octanoyl chloride
Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1
Oxalic acid, monoamide, N-(4-me
Oxirane, 2,2'-(1,4-butanediyl)bis-
o-Xylene
Oxymetholone
Pent-3-yn-2-ol, 2-cyclopropyl-5-(
Pentane, 2,2,3,3-tetramethyl-
Pentane, 3,3-diethyl-
Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-
Pentasiloxane, dodecamethyl-
Perhydro-htx, 1-acetyl-, acetate(es
Phenol, 2,6-dichloro-4-nitro-
Phenol, 4-cyclohexyl-O-[4-bromo
piperidine, 1-(5-fluoro-2-nitrophe
Pregn-5-en-20-one, 12-(acetyloxy
Pregn-5-en-20-one, 3.beta.-(trimet
Pregnan-20-one, 3,11,21-tris[(trim
Propanamide, N-[4-(5-ethyl-1,2,4-
Propane, 1-(2,2-dichloro-1,3,3-tri
Propanoic acid, 2,2-dimethyl-, 2,3
Propanoic acid, 2-[(5,7-dimethyl[1
Propenoic acid, 2-cyano-3-dimeth
Pyrazine, 2,3,5-tris(1,1-dimethylet
Pyridazin-3(2H)-one, 6-chloro-2-p
Pyridine, 1,2,3,6-tetrahydro-1-met
Pyridine, 2,6-diamino-3-((2,5-dich
Pyrrolidine, 2-(ethoxymethyl)-3-[
Sebacic acid, di(2,2-dichloroethyl
Silane, [[(3.beta.)-cholest-5-en-3-
Silane, 1,6-heptadiyne-1,7-diylbis
Silane, dimethyl(2,2,2-trichloroeth
Silane, dimethyl(3-phenylprop-2-e
Silane, diphenyl-bis-[2-(1,3,5,5,7,
Silicic acid, diethyl bis(trimethyls
Sulfoxide, hexadecyl methyl
Terephthalic acid, 3-methyl-5-met
tert-Butyl (2-aminophenyl)carbam

Butyric acid, 4-phenyl-, isobutyl e	Cyclohexanamine, N-cycloheptyli		Propionitrile, 3-[(2-adamantyliden	tert-Butyldimethylsilyl 2,3-dimeth
CAPS	Cyclohexanamine, N-cyclooctylid		Pyridine, 1,2,3,6-tetrahydro-1-met	Tetracosamethyl-cyclododecasilox
Carbamic acid, N-(4-pyridyl)-, 2-(	Cyclohexane, 1,1-dimethoxy-		Pyridine-3-carboxamide, oxime, N	Tetradecane, 1-chloro-
Carboethoxy-1-piperazinethiocarb	Cyclohexane-1,3-dione, 2-allylam		Pyrrolidine-2,5-dione, 1-[1-(3-chl	Thiocolchicine
Carbonic acid, 2-ethylhexyl octyl	Cyclohexanecarbonitrile, 1-hydro		Pyrrolidine-2,5-dione, 3-(4-formyl	Thymol, TBDMS derivative
Carbonic acid, 6-chlorohexyl neop	Cyclohexanecarboxylic acid, 2-me		Sebacic acid, decyl 2,2-dichloroet	Thymol, TMS derivative
Carbonic acid, isohexyl 2,2,2-tric	Cyclohexanecarboxylic acid, 4-me		Sebacic acid, di(2,2-dichloroethyl	trans-2,3-Epoxydecane
Carbonic acid, octyl 2,2,2-trichlor	Cyclohexanemethanol, 1,6-dimeth		Silane, [(11-chloroundecyl)oxy]tri	trans-4-Octylcyclohexylmethanol
Carbonic acid, propargyl 2,2,2-tric	Cyclohexanol, 2-(2-ethylhexyl)-		Silane, chlorodiethylheptyloxy-	Tricyclo[4.2.1.0(2,5)]non-7-ene, 3
Carda-16,20(22)-dienolide, 3-[(6-	Cyclohexanol, 2,4-dimethyl-		Silane, dimethyl(2,2,2-trichloroeth	Trimethylsilyl 3-methyl-4-[(trimet
Carvacrol, TBDMS derivative	Cyclohexanol, 2-methyl-5-(1-meth		Silane, triethyl(2-phenylethoxy)-	Trimethylsilyl-di(timethylsiloxy)-s
Cedranoxide, 8,14-	Cyclohexanol, 2-methylene-3-(1-		Silicic acid, diethyl bis(trimethyls	Tris(tert-butyldimethylsilyloxy)ars
Chloroacetic acid, 3-chloropropyl	Cyclohexanone, 3-methyl-, (2,4-di		Tartronic acid, 4-(dimethylethylsil	Trisiloxane, 1,1,3,3,5,5-hexameth
Chloroacetic acid, octyl ester	Cyclohexene, 3-trifluoroacetamid		tert-Butyl N-methyl-N-(piperidin-	Undec-10-ynoic acid, isobutyl est
Chloromethyl 5-chloro-octanoate	Cyclohexene, 6-(methoxymethoxy		tert-Butyldimethylsilyl 2,3-dimeth	Undec-10-ynoic acid, octyl ester
Cholesta-9(11),20(22)-diene-3,23	Cyclohexylamine, N-(3,3-dimethy		Tetrahydrofuran-2-one, 3-[1-fluoro	Undecane
Cholestan-7-ol, 8,14-epoxy-3-(ph	Cycloocta-1,3-dioxole, octahydro-		Tetrahydropyran, 5-hydroxy-6-hyd	Urea, N-[5-(ethylsulfonyl)-1,3,4-t
cis,trans-2-Methyl-1-thiadecalin	Cyclopentane, 2-(1-hydroxy-2-pro		Tetrasiloxane, decamethyl-	Valeric acid, 2,3-epoxy-3,4-dimeth
cis-1,4-Cyclohexanediol, mono-tri	Cyclopentanecarboxylic acid, 3-m		Thiourea, 1-(adamantane-1-carbon	Valeric acid, 2,7-dimethyloct-7-en
cis-11,12-Epoxytetradecen-1-ol	Cyclopentanol, 3,3,4-trimethyl-4-		Thiourea, N-cyclohexyl-N'-methyl	
Cis-2,3-dimethylthiane	Cyclopropane, 1,1-dichloro-2,2,3-		Thymol, TBDMS derivative	
cis-Dodec-5-enal	Cyclopropane, 1-bromo-1-(3-meth		Thymol, TMS derivative	
cis-Verbenol	Cyclopropane, 1-chloro-2-bis(diet		Toluene, 5-nitro-2-(4-nitrobenzyli	
ClCH2(CH2)3C(O)OCH3	Cyclopropane, 1-methyl-2-(3-meth		trans-4-Octylcyclohexylmethanol	**T11**
Cyclobarbital	Cyclopropane, 2-chloro-1-ethyl-1-		Triallylphosphine	(1R,2S,8R,8Ar)-8-acetoxy-1-(2-h
Cyclodecanone, oxime	Cyclopropaneacetic acid, 2-hexyl-		Tricyclo[3.2.1.0(2,4)]octane-6-car	(3,5-Dimethyl-1H-pyrazol-1-ylmet
Cyclodecasiloxane, eicosamethyl-	Cyclopropanecarboxylic acid, 2,2-		Tricyclo[4.2.1.0(2,5)]non-7-ene, 3	(7R,8S)-Ethyl 8-hydroxy-trans-bic
Cyclododecane, 1,5,9-tris(acetoxy	Cyclopropanedecanoic acid, 2-hex		Tricyclo[4.2.2.1(2,5)]undecane	(Octane-1-sulfonyl)acetic acid
Cycloheptano[d]imidazolidine, 1,	Cyclopropanenonanoic acid, meth		Trimethylsilyl 2-(trimethylsilyloxy	.alpha.-Tetralol, 2-amino-5,6-dime
Cycloheptanol, 2-chloro-, trans-	Cyclopropaneoctanoic acid, 2-hex		Trimethylsilyl 3-methyl-4-[(trimet	.delta.-Tocopherol, TMS derivativ
Cycloheptasiloxane, tetradecamet	Cyclotetrasiloxane, octamethyl-		Trimethylsilyl-di(timethylsiloxy)-s	[1,2,4]Triazolo[4,3-a]pyrimidine-6
Cyclohexane, 1,1-dimethoxy-	Cyclotrisiloxane, hexamethyl-		Tris(tert-butyldimethylsilyloxy)ars	1-(1-Hydroxyethyl),1-(hydroxyme
Cyclohexane, methyl-	d,l-Xylitol, 1-O-undecanoyl-		Undec-10-ynoic acid, octyl ester	1-(3-Cyanopropyl)-4-(2-methoxyp
Cyclohexanecarboxylic acid, 2-ox	Decahydro-8a-ethyl-1,1,4a,6-tetra		Undecanoic acid, dimethyl(3,3,3-t	1-(4-Chlorophenoxy)-1-(1H-imida
Cyclohexanemethanol, 1,6-dimeth	Decan-2-yl ethyl carbonate		Urea, N-[5-(ethylsulfonyl)-1,3,4-t	1,1,1,3,5,5,5-Heptamethyltrisiloxa
Cyclohexanepropanoic acid, 2-pro	Diethylmalonic acid, di(dodec-9-y		Z-9-Hexadecen-1-ol acetate	1,1,3,3,5,5,7,7-Octamethyl-7-(2-m
Cyclohexanol, 3-methyl-2-(1-meth	Diethylmalonic acid, monochlorid			1,10-Decanediol, 2TMS derivative
Cyclohexanone, 3-methyl-, (2,4-di	Diglycolic acid, 2-isopropylpheny			1,2,4-Trioxolane-2-octanoic acid,
Cyclohexanone, 4-methyl-, O-met	Dihydroartemisinin, 5-deshydroxy			1,2,5,6-Tetrahydropyridine, 1-met
Cyclohexanooxazin-2(1H)-one, 3,	Diisooctyl phthalate			1,2-benzenedicarboxylic acid, 3-n
Cyclohexasiloxane, dodecamethyl	Dimethoxydimethylgermanium			1,2-Bis(trimethylsilyl)benzene
Cyclononasiloxane, octadecameth	Di-n-decylsulfone			1,2-Dimethoxy-4-(1-methoxy-1-pr
Cycloocta-1,3-dioxole, octahydro-	Disiloxane, 1,3-diethoxy-1,1,3,3-t			

Cyclooctasiloxane, hexadecameth	DISTEARIN			1,2-O-Isopropylidene-3-O-methan
Cyclopenta[c]furo[3',2':4,5]furo[2,	d-Mannitol, 1-decylsulfonyl-			1,4:3,6:5,7-Tribenzal-.beta.-mann
Cyclopentane, 1,1,3,4-tetramethyl	d-Mannitol, 1-O-(16-hydroxyhexa			1,4-Androstadien-17.beta.-ol-3-on
Cyclopentaneethanol, 4-(acetylox	Dodecahydropyrido[1,2-b]isoquin			1,4-Benzenediol, 2,5-bis(1,1-dime
Cyclopentanol, acetate	Dodecanedioic acid, 2,11-dibromo			1,4-Bis(trimethylsilyl)benzene
Cyclopropane, 1,1-dichloro-2,2,3-	Dodecanedioic acid, diethyl ester			1,7-Di(dodec-9-ynyl)-2,2,4,4,6,6-
Cyclopropane, 1-methyl-2-(3-meth	E-8-Methyl-7-dodecen-1-ol acetat			1,7-Diazabicyclo[2.2.0]heptane, 7
Cyclopropaneacetic acid, 2-hexyl-	E-8-Methyl-9-tetradecen-1-ol acet			1,7-Dioxadispiro[4.0.5.3]tetradec-
Cyclopropanecarboxylic acid,2-(1	Ergost-5-ene-3,25-diol, 2TMS der			10-Heptadecen-8-ynoic acid, meth
Cyclopropyl-(2-nonyloxy-benzyl)	erythro-7,8-Dichlorodisparlure			13-Methyltetradec-9-enoic acid, T
Cyclotetrasiloxane, octamethyl-	Estra-1,3,5(10)-trien-17.beta.-ol			14-Oxabicyclo[10.3.0]pentadecan
Cyclotrisiloxane, hexamethyl-	Ethanethioic acid, S-[8-(diethylph			17.beta.-Acetoxy-1',1'-dicarboetho
d,l-Xylitol, 1-O-undec-10-enoyl-	Ethanol, 2-[2-(4-nonylphenoxy)et			18-O-Feruloyloxyoctadec-9-enoic
Danazol	Ethofumesate			19-Norethindrone, trifluoroacetate
Dasycarpidan-1-methanol, acetate	Ethyl 4,4,6,6,8,8-hexamethyl-11-o			1-Benzazirene-1-carboxylic acid,
Decane, 2,3,5,8-tetramethyl-	Ethyl homovanillate, TMS derivat			1-Butanol
Decanedioic acid, 3,8-dioxo-, dim	Ethyl propargyl sulfone			1-Cyclopropyl-2,3,3-trifluorocycl
dibenz[b,f]azocine, 5,6,11,12-tetra	Ethylbenzene			1H-1,2,3-Triazole-4-carboxylic ac
Dichloroacetic acid, 2-methyloct-5	Fumaric acid, hexyl tetradec-3-eny			1-Oxaspiro[4.5]dec-2-en-4-one, 2
Dichloroacetic acid, tridec-2-ynyl	Fumaric acid, monochloride, 6-eth			1-phosphinolineethanol, 1,2,3,4-te
Dicyclopropylmethanol, trifluoroa	Gentamicin a			1s,2R,3R,4R,7R,11R-1,3,4,7-Tetr
Diethylmalonic acid, di(dodec-9-y	Gibb-3-ene-1,10-dicarboxylic acid			2-(2-Carboxyethyl)-6,6-dimethyl-
Digitoxin	Ginsenol			2-(3-Oxo-2-pent-2-enylcyclopenty
Dihydroartemisinin, 5-deshydroxy	Glutaric acid, myrtenyl cyclohexyl			2-(Ethylenedioxy)ethylamine, N-m
Dihydroxymaleic acid	Heneicosane, 11-cyclopentyl-			2,2,2-Trichloro-1-(2-nitrophenylth
Diisooctyl phthalate	Heneicosanoic acid, 20-oxo-, meth			2,2,3,5,6,6,7-Heptamethyl[1,4,2,3,
Dimethylmalonic acid, 2-isopropo	Hentriacontane-10,14,16-trione, T			2,2-Dimethoxybutane
Dimethylmalonic acid, monochlor	Heptan-2-yl trifluoroacetate			2,3-O-Benzal-d-mannosan
Disiloxane, 1,3-diethoxy-1,1,3,3-t	Heptane, 3,4,5-trimethyl-			2,4,6-Cycloheptatrien-1-one, 3,5-
d-Mannitol, 1,1'-O-1,16-hexadeca	Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,			2,4-Benzylidene-d-glucose
d-Mannitol, 1-decylsulfonyl-	Heptasiloxane, hexadecamethyl-			2,4-Di-tert-butylthiophenol
d-Mannitol, 1-O-(22-hydroxydoco	Hexa(methoxymethyl)melamine			2,5-Cyclooctadien-1-ol
Docosanoic acid, 1,2,3-propanetri	hexadecanamide, N-(3-chloro-1,4-			2,5-Octadecadiynoic acid, methyl
Docosanoic acid, docosyl ester	Hexadecane, 1,16-dichloro-			2,6-Dihydroxyacetophenone, 2TM
Dodecanedioic acid, 2TBDMS de	Hexadecanoic acid, (3-bromoprop			2,6-Dihydroxybenzoic acid, 3TM
Ethane, 1,1,1,2-tetrachloro-	Hexadecanoic acid, 2-bromo-			2,6-Lutidine 3,5-dichloro-4-dodec
Ethane, 1,2,2-trichloro-1,1-difluor	Hexadecanoic acid, 2-hydroxy-3,7			2-Butanol, 3-methyl-, acetate
Ethanol, 2-(octyloxy)-	Hexadecanoic acid, 2-methoxy-5,6			2-Ethyl-1-hexanol
Ethanol, 2,2'-[1,4-butanediylbis(th	Hexane, 3,3,4-trimethyl-			2-Fluoro-3-trifluoromethylbenzoic
Ethanone, 1-cyclopropyl-, oxime	Hexanoic acid, 3-(2,2,3,3-tetramet			2H-[1,2,4]Triazole-3-sulfonic acid
Ethanone, 2-azido-1-(4-methyl-3-f	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,			2H-1,2,3-Triazole-4-carboxylic ac
Ethisterone	Hexasiloxane, tetradecamethyl-			
Ethoxy(methyl)chlorosilane	Hexestrol, 2TMS derivative			

Ethyl 2-butyramido-3,3,3-trifluoro	Hydrazinecarboxamide, 2-(2,6-cyc			2-Hexanol, acetate
Ethyl hexatriacontyl ether	Imidazole-2-carboxylic acid, 1-me			2H-Pyran, tetrahydro-2-[(1-methyl
Ethyl homovanillate, TMS derivat	i-Propyl 10-methyl-dodecanoate			2-Hydroxyhippuric acid, 2TMS de
Ethyl octan-2-yl carbonate	i-Propyl 5,9,19-octacosatrienoate			2'-Hydroxypropiophenone, TMS d
Ethylbenzene	Isobutyl acetate			2-Methyl-1-pentamethyldisilyloxy
Exo-tricyclo[6.2.1.0(2.7)]undecan	Isopentyl 3-hydroxy-2-methyleneb			2-Methyl-6-(5-methyl-2-thiazolin-
Fenretinide	Ketone, methyl 2-pyridyl, 4-cyclo			2-Morpholin-4-yl-N-(1-phenyl-eth
Formic acid, 10-chlorodecyl ester	l-(+)-Ascorbic acid 2,6-dihexadec			2-Nonenal, (E)-
Fumaric acid, 2-ethylhexyl hex-4-	l-Gala-l-ido-octose			2-Oxa-7-thiatricyclo[4.4.0.0(3,8)]
Fumaric acid, cycloheptyl hexyl es	Lup-20(29)-ene-3,21,28-triol, 28-			2-Pentanol, acetate
Fumaric acid, isobutyl tetradec-3-	Lupeol			2-Pentenal, 2,4,4-trimethyl-
Furazano[3,4-b]pyrazine, 5-(1-per	Menthol, 1'-(butyn-3-one-1-yl)-, (			2-Propen-1-one, 1,3-diphenyl-, (E
Galactitol	Menthyl trimethylsilylmethyl malo			2-Propyn-1-amine, N,N-di-2-prop
Geranyl isovalerate	Methoprene			2-Pyrrolidinone, 1,5-dimethyl-3,3
Gibb-3-ene-1,10-dicarboxylic acid	Methyl 10-methoxycarbonyl-17-o			2-Undecanethiol, 2-methyl-
Ginsenol	Methyl 10-oxo-8-decenoate			3-([4-(4-Fluorophenyl)-5-methyl-2
Glycerol monostearate, 2TMS der	Methyl 16-acetoxyheptadecanoate			3-(2-Benzyl-benzoimidazol-1-yl)-
Glycine, N-[N-[N-[N-(N-carboxy-	Methyl 18-fluoro-octadec-9-enoat			3-(2-Chlorophenyl)-[1,2,4]triazolo
Heneicosanoic acid	Methyl 18-oxidanyloctadeca-9,12			3-(6-Bromohexyl)-2,4,10-trioxaad
Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,	Methyl 2-hydroxy-eicosanoate			3,5-Dimethoxycinnamic acid
Heptasiloxane, hexadecamethyl-	Methyl 3-O-mesyl-5-O-methoxyca			3-Aminobenzoic acid, 2TMS deri
Hexahydropyridine, 1-methyl-4-[4	Methyl 7-oxopentadecanoate			3-Butoxy-1,1,1,5,5,5-hexamethyl-
Hexanal, (2-nitrophenyl)hydrazon	Methyl 9-tetradecenoate			3-Chloro-2,2-dimethyl-1-propanol
Hexanoic acid, 3,5,5-trimethyl-, 2,	Methylphosphonic acid, fluoroanh			3-Ethoxy-1,1,1,5,5,5-hexamethyl-
Hexanoic acid, 3,5,5-trimethyl-, h	Murexide			3-Fluoro-5-trifluoromethylbenzoic
Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,	N-(Trimethylsilyl)-9-(5-{[(trimeth			3-Isopropoxy-1,1,1,5,5,5-hexamet
Hexestrol, 2TMS derivative	N-[1-(4-Chlorobenzyl)-4-(1,2,4-tr			3-Methoxy-2,4,5-trifluorobenzoic
Histamine, 5-nitro-N-trifluoroacet	Naphth[1,2-b]oxirene, decahydro-			3-Nonyn-1-ol
Hydrazinecarboxamide, 2-(2-ethyl	n-Heptadecan-1,2-diol,bis-(trimet			3-Pentanol, 1-chloro-3-methyl-
Hydrocinnamic acid, benzyldimeth	n-Heptyl hexanoate			4-(2,6,6-Trimethylcyclohexa-1,3-d
Imidazole, 2-fluoro-5-hydroxy-1-r	Nickel, pentamethylcyclopentadie			4-(2-Fluorobenzoylamino)piperidi
Imidazole, 4-methyl-5-[2-methyl-2	Nipecotic acid, 1-methyl-, methyl			4-(Acridin-9-ylamino)-butyric aci
Imidazole-2-[3-thiopropionic acid	N-Methyl-1-adamantaneacetamide			4(equaorialt)-Ethenyl-1,2(equatori
i-Propyl 9-tetradecenoate	N-Oleoyl-L-glycine,trimethylsilyl			4,5,6,7-Tetrahydro-benzo[c]thioph
Isopulegol	Nonane, 4-methyl-			4,5-Dimethoxy-1-naphthyl dimeth
Isothiazole, 5-bromo-3-methyl-	n-Propyl 9-octadecenoate			4,6-di-tert-Butylresorcinol
Lavandulyl caproate	n-Propyl 9-tetradecenoate			4,8,12-Tetradecatrien-1-ol, 5,9,13-
Ledene oxide-(II)	N-p-tolueneulfonyl-O-[(p-nitroph			4-Acetyloxyimino-6,6-dimethyl-3-
l-Gala-l-ido-octose	N-Sec-butyl-3-(2-hydroxy-3,4-dim			4-Ethynyl-2,7-dimethyl-trans-deca
Malonic acid, mononitrile, monot	Octadecane, 1,1'-[1,3-propanediyl			4H,5H-Pyrano[4,3-d]-1,3-dioxin, t
Mercaptoethanol, 2TMS derivativ				4-Heptanol, 3-ethyl-
Methyl 10,11-tetradecadienoate				4-Hexenoic acid, 6-(acetyloxy)-4-
Methyl 10-methoxycarbonyl-17-o				4-Hydroxybenzoic acid, 2TMS de

Methyl 2-tetradecyloxiranecarbox	Octadecanoic acid			4-Methoxy-2,3-dimethyl-2,3-dihy
Methyl 4-(4-methoxyphenyl)-2-m	Octadecanoic acid, 16-oxo-, meth			4-Methyl-2-mercaptopyridine-1-o
Methyl 8-heptadecenoate	Octadecanoic acid, 2-chloro-, met			4-Methyl-2-pentyl acetate
Methyl E-11-tetradecenoate	Octan-2-yl propyl carbonate			4-Methyl-3-(3-nitrophenyl)-6-phe
Methyl stearate	Octanoic acid, 3-oxo-4-(2-propen			4-tert-Amylphenol, TMS derivativ
morpholine, 4-(2-phenyl-2H-1-ben	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1			4-tert-Butylphenol, TMS derivativ
N-(Trimethylsilyl)-9-(5-{[(trimeth	Oxacyclododecan-2-one			5,5-Dimethyl-cyclohex-3-en-1-ol
N,6-Dimethyl-3H,4H-pyrrolo[1,2-	Oxalic acid, 6-ethyloct-3-yl propy			5,8,11-Eicosatrienoic acid, (Z)-, T
N,N-Diallylformamide	Oxirane, 2-(2-bromoethyl)-2-(t-bu			5-Methylsalicylic acid, 2TMS der
N,N'-Methylenebis(oleamide), (Z,	Oxiranedodecanoic acid, 3-octyl-,			5-Pyrimidinecarboxylic acid, hexa
N-[3-[N-Aziridyl]propyl]-2-[2-pyr	Oxiranemethanol, 3-methyl-3-(4-m			6,8-Dioxabicyclo[3.2.1]octan-4-o
N-Cinnamoyl-N-(4-methoxypheny	o-Xylene			6.beta.-Hydroxymethandienone, 2
n-Dodecylpyridinium chloride	Pentadioic acid, dihydrazide, N2,			6-Chlorohexanoic acid, TMS deri
N-Ethyl-hexahydro-1H-azepine	Pentanoic acid, 2-methyl-4-oxo-			6-Chlorohexanoyl chloride
n-Heptadecan-1,2-diol,bis-(trimet	Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-			6H-Furo[2',3':4,5]oxazolo[3,2-a]p
N-Hexadecylpyridinium bromide	Pentasiloxane, dodecamethyl-			6-Hydroxy-7-N-docosylmercapto-
N-Methyl-1-adamantaneacetamide	Pentylamine, N-ethyl-N-nitroso-			6-Methoxyhexan-1-ol, TMS deriv
N-Methyl-4-(3-nitrobenzamido)ph	Periplocymarin			6-Nonenal, (Z)-
N-Methyl-pseudotomatidine diace	Phenol, 2,6-dichloro-4-nitro-			7,7,8,8-Tetramethyl-6,9-dioxa-1,2
Nonadecanenitrile	Phthalic acid, di(1-tert-butoxypro			8-Bromooctanoic acid, ethyl ester
n-Propyl 9-octadecenoate	Piperazine, 1-(2-fluorophenyl)-4-[			8-Methyl-6-nonenoic acid
n-Propyl 9-tetradecenoate	p-Mentha-1,8-dien-7-yl acetate			9-Borabicyclo[3.3.1]nonane, 9-me
n-PROPYL DECYL ETHER	p-N-[3-[N-Aziridyl]propyl]toluidi			Acetic acid, butyl ester
n-Tetradecanoic acid, pentamethyl	Pregna-1,4-dien-3-one, 11.beta.,17			Acetic acid, chloro-, decyl ester
o-Acetyl-L-serine	Propanamide, 2,2-dimethyl-N-(2-p			Acetic acid, chloro-, isobutyl ester
Octadecane-1,2-diol, 2TMS deriva	Propanenitrile, 3-(5-diethylamino-			Acetic acid, pentyl ester
Octadecanoic acid, 12-oxo-, meth	Propanoic acid, 3-hydroxy-3-phen			Acetohydrazide, 2-benzylthio-N2-
Octadecanoic acid, 16-oxo-, meth	Pterin-6-carboxylic acid			Anthracene, 9,10-dihydro-9,9,10-t
Octadecanoic acid, 17-oxo-, meth	Pyridine, 1,2,3,6-tetrahydro-1-met			Aziridine, 2-methyl-2-(2,2,4,4,6,6
Octadecanoic acid, 2,3-dihydroxy	Pyridine, 1,4-dihydro-1-decyl-4-i			Benzamide, 4-(2,4,6-trimethylben
Octadecanoic acid, 2-hydroxy-1,3	Pyridine, 3,5-dichloro-, 1-oxide			benzenamine, N,2,3,5,6-pentameth
Octadecanoic acid, 2-hydroxyethy	Pyrido[1,2-e][1,5]diazacycloepta			Benzene, (2,3-dimethyldecyl)-
Octahydroquinolin-10-ol	Rhodium, acetylanilinato-bis(ethy			Benzene, 1-(1,1-dimethylethyl)-4-
Octane	Sebacic acid monomethyl ester			Benzene, 1,3-dimethyl-
Octane, 2-bromo-	Sebacic acid, di(2,2-dichloroethyl			Benzenemethanol, 2,4,6-trimethyl
Octane, 2-methyl-	Silane, chlorodiethylheptyloxy-			Benzestrol, 2TMS derivative
Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1	Silane, dimethyl(2,2,2-trichloroeth			Benzoic acid, 2-(2-oxo-2-piperidi
Oxalic acid, 6-ethyloct-3-yl hexyl	Silane, dimethyl(dec-4-enyloxy)et			benzoic acid, 4-[[(trimethylsilyl)o
Oxamide, N'-4-fluorophenyl-N''-2-	Silane, methylvinyl(2,4,4-trimethy			Benzothiophene-3(2H)-one, 2-(3-
Oxazolidin-2-one, 3-tert-butyl-5-p	Silane, methylvinyl(phenoxy)prop			Butanamide
Oxirane, 2-(2-bromoethyl)-2-(t-bu	Silicic acid, diethyl bis(trimethyls			Butane, 1,1',1''-[methylidynetris(th
Oxirane, 2,2-dimethyl-3-[3,7-dime				Butanoic acid, 2-ethylcyclohexyl
Paromomycin				Calcifediol

Patchouli alcohol	Spiro[4.5]decane-1,6-dione			Carbamic acid, N-(4-methylpheny
p-Cyanophenyl p-(2-propoxyetho	Spiro[adamantane-2,2'(5'H)-furan]			Carbonic acid, heptyl methyl ester
Pentaerythritol	Spiro-3-(2-butyl-2,4-diazabicyclo[			Carbonic acid, nonyl 2,2,2-trichlo
Pentane, 2,3-dimethyl-	Succinic acid, 2-fluorophenyl 3-m			Carvacrol, TBDMS derivative
Pentanoic acid, cyclohexyl ester	Succinic acid, cyclohexylmethyl 8			Carvacrol, TMS derivative
Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-	tert-Butyldimethylsilyl 2,3-dimeth			Cedran-diol, 8S,13-
Pentasiloxane, dodecamethyl-	Tetrahydro-3,3,5,5-tetramethyl-6-p			Chloromethyl 5-chloro-octanoate
Perhydro-htx-8-one, 1-acetyl-2-de	Tetrahydrooxazole-2-one, N-[1-flu			Cholestan-3,26-diol-22-oxime
Phenacyl 11-octadecenoate	Tetrasiloxane, decamethyl-			cis-2-Methyl-4-n-pentylthiane, S,
Phenol, 2,6-dichloro-4-nitro-	Thiocyanic acid, (1Z)-1-[(phenylth			cis-Verbenol
phenoxyethanol, TMS derivative	Thiophene, 2-[2-(3-thienyl)etheny			Cyclodecasiloxane, eicosamethyl-
Phenylacetic acid, 4-(cyclohexane	Thunbergol			Cyclohexane, 1,1-dimethoxy-
Phenylalanine, N-trifluoroacetyl-4	Thymol, TBDMS derivative			Cyclohexane, 1-methyl-2-pentyl-
Phenylethylene, 3'-methoxy-2,2'-d	Thymol, TMS derivative			Cyclohexane, isothiocyanato-
Piperidine-1-sulfonic acid (4-fluo	Titanium, [(1,2,3-.eta.)-2-butenyl]			Cyclohexanone, 2-methyl-, oxime
Piperidine-4,4-diol	trans-2,3-Epoxydecane			Cyclopentanol, acetate
p-Menth-1-en-3-one, semicarbazo	trans-3-(2,2-Dichlorovinyl)-2,2-di			Cyclotetrasiloxane, (iodomethyl)h
p-Nitrobenzylidene tert-butylamin	trans-3,4-Epoxynonane			Cyclotetrasiloxane, octamethyl-
p-Octyloxybenzonitrile	trans-4-Octylcyclohexylmethanol			Cyclotrisiloxane, hexamethyl-
Pregn-4-ene-3,20-dione, 11,21-bis	trans-4-t-Pentylcyclohexanol			Decane
Pregn-4-ene-3,20-dione, 17,21-dih	trans-9-Octadecenoic acid, pentyl			Dehydroxy-isocalamendiol
Pregn-5-en-20-one, 3,16-bis[(trim	Triallyl cyanurate			d-Glucitol, 1-S-octyl-1-thio-
Pregnan-20-one, 3,11,21-tris[(trim	Trichloroacetic acid, 2-methyloct-			Dichloroacetic acid, 2-ethylhexyl
Pregnane-3,20-dione, 16-methylen	Tricyclo[3.3.1.0(3,7)]nonane, 9,9-			Dimethylmalonic acid, tridecyl 2,3
Propanoic acid, 2-chloro-, pentyl e	Tricyclo[4.2.1.0(2,5)]non-7-ene, 3			Di-n-decylsulfone
Propanoic acid, 3-chloro-2,2-dime	Trimethylphenylgermanium			Di-n-octyl phthalate
Propanoic acid, 3-hydroxy-3-phen	Trimethylsilyl 3-methyl-4-[(trimet			Disiloxane, 1,3-diethoxy-1,1,3,3-t
Propanoic acid, 3-mercapto-, dode	Trimethylsilyl-di(timethylsiloxy)-s			d-Mannitol, 1-decylsulfonyl-
Propiophenone, 3-phenyl-3-piperi	Undec-10-ynoic acid, heptyl ester			Docosanoic acid, docosyl ester
Pseudosmilagenin bis[3,5-dinitrob	Undecane, 3-cyclohexyl-			Dodecahydropyrido[1,2-b]isoquin
Pterin-6-carboxylic acid	Undecanoic acid, 11-mercapto-			D-Streptamine, O-6-amino-6-deox
Purin-2,6-dione, 1,3-dimethyl-8-[	Urea, N-[5-(ethylsulfonyl)-1,3,4-t			Eicosane, 3-methyl-
Purine, 6-carboxamido-9-.beta.-d-	Uridine			Ergostan-6-one, 3,25-bis(acetylox
Purine-2,6-dione, 8-(3-ethoxyprop	Z,Z,Z-1,4,6,9-Nonadecatetraene			ethanone, 1-[5-(dimethylamino)-2
Pyrazole, 3,5-dimethyl-4-nitro-	Z,Z-3,13-Octadecedien-1-ol			Ethyl 4,4,6,6-tetramethyl-9-oxo-3,
Pyridine, 1,2,3,6-tetrahydro-1-met	Z,Z-8,10-Hexadecadien-1-ol aceta			Ethyl homovanillate, TMS derivat
Pyrido[1,2-a]pyrimidin-4(5H)-one	Z-3,17-Octadecadien-1-ol acetate			Ethylbenzene
Pyrimidine, 2-[4-(3-pyridinylmeth	Z-3-Tetradecen-1-ol acetate			Furane-2,5-dicarbohydrazide, N2',
Pyrrole-2-carboxylic acid, 4-(3-eth	Z-8-Pentadecen-1-ol acetate			Gibb-3-ene-1,10-dicarboxylic acid
Pyrrolidine-2,5-dione, 1-ethyl-3,3'				Ginsenol
Quinic acid				Glutaric acid, cyclohexylmethyl 2,
Quinolin-2-ol, 6-chloro-4-methyl-				Glutaric acid, dodecyl tetrahydrof
Retinal				Heptane, 5-ethyl-2-methyl-

Santamarine				Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,
Sebacic acid, 2,2-dichloroethyl iso				Heptasiloxane, hexadecamethyl-
Selenomethionine, methyl ester				Hexahydropyridine, 1-methyl-4-[4
Silane, [[(3.beta.)-cholest-5-en-3-				Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,
Silane, 1,6-heptadiyne-1,7-diylbis				Hexasiloxane, tetradecamethyl-
Silane, chlorodiethyl(3-heptyloxy				Imidazole-2-[3-thiopropionic acid
Silane, dimethyl(dec-4-enyloxy)no				i-Propyl 9-tetradecenoate
Silane, dimethyldimethyl((dodec-9				Isopinocarveol
Silicic acid, diethyl bis(trimethyls				l-Methionine, N-(2-chloroethoxyc
Spiro[5-imidazolinone-4,4'-piperi				Lup-20(29)-ene-3,21,28-triol, 28-
Spiro[androst-5-ene-17,1'-cyclobu				L-Valine, N-[2-(chloroimino)-3-m
Stearic anhydride				Methoxyacetic acid, 2-octyl ester
Streptovitacin A				Methyl 18-oxidanyloctadeca-9,12
Succinic acid, 2-isopropoxypheny				Methyl 2-methyl-2-(methoxy-benz
Succinic acid, 3,4-dichlorophenyl				Methyl 3-[1-[2-pyridyl]-n-butylid
Succinic acid, cyclohexylmethyl 3				Methyl 9-tetradecenoate
Succinic acid, cyclohexylmethyl n				Methyl eicos-11-en-14-ynoate
Succinic acid, hept-2-yl neryl este				Methyltris(trimethylsiloxy)silane
Succinic acid, isobutyl trans-4-ter				N-(5-Hydroxy-2-oxo-5-phenyl-1-a
Sucrose				N-[3,5-Dinitropyridin-2-yl]valine
Tartronic acid, 4-(dimethylethylsil				Naphth[1,2-b]oxirene, decahydro-
tert-Butyl (2-aminophenyl)carbam				Naphthalene, decahydro-2,3-dime
tert-Butyldimethylsilyl 2,3-dimeth				N-Cyclooct-4-enylacetamide
Tetracosamethyl-cyclododecasilox				n-Nonadecanoic acid, pentamethy
Tetradecanoic acid, tripropylsilyl e				Nonane
Tetrasiloxane, 1,1,3,3,5,5,7,7-octa				N-t-Butyldioxymethyl-N-methylcy
Tetrasiloxane, decamethyl-				Octahydroquinolin-10-ol
Thiazolo[3,2-a]pyridinium, 3,8-di				Octanal
Thieno[2,3-c]furan-3-carbonitrile,				Octane, 2,6-dimethyl-
Thymol, TBDMS derivative				Octasiloxane, 1,1,3,3,5,5,7,7,9,9,1
Thymol, TMS derivative				Oxirane, [(hexyloxy)methyl]-
trans-1,2-Diethoxycyclohexane				Oxirane, dodecyl-
trans-2,3-Dimethoxycinnamic acid				o-Xylene
trans-2,4,5-Trimethoxy-.beta.-met				Paromomycin
trans-2-Decen-1-ol, pentafluoropr				Pentane, 1,2-dichloro-
trans-2-Hexenoic acid, 5-methyl-2				Pentanoic acid, 3-methyl-4-oxo-
trans-2-Methyl-4-n-butylthiane				Pentasiloxane, 1,1,3,3,5,5,7,7,9,9-
trans-4,5-Epoxynonane				Pentasiloxane, dodecamethyl-
trans-4-Methoxycinnamaldehyde				Phenol, 4-nitro-2-(6,7-dimethylbe
Tricyclo[4.2.1.0(2,5)]non-7-ene, 3				Phosphetane, 1-(butylthio)-2,2,3,4
Tricyclo[4.2.1.1(2,5)]decan-9-one,				Phthalic acid, di(4,4-dimethylpent
Tricyclo[4.3.1.1(3,8)]undecane-3-				Pregnan-18-oic acid, 20-hydroxy-,
Tricyclo[6.3.0.0(1,5)]undec-2-en-4				Propanamide, 2-benzoylamino-3-p

Trimethylsilyl 3-methyl-4-[(trimet				Protocatechoic acid, 3TMS deriva
Trimethylsilyl-di(timethylsiloxy)-s				Pterin-6-carboxylic acid
Trimethylsilylmethanol				Pyrazolo[1,5-c]pyrimidine-4-carbo
Tris(tert-butyldimethylsilyloxy)ars				Pyridine, 3,5-dichloro-, 1-oxide
Trispiro[4.2.4.2.4.2.]heneicosane				Silane, chlorodiethylheptyloxy-
Undec-10-ynoic acid				Silane, dimethyl(3-phenylprop-2-e
Undec-10-ynoic acid, hexyl ester				Silicic acid, diethyl bis(trimethyls
Undec-10-ynoic acid, nonyl ester				Spiro[5.5]undecane, 1-methylene-
Undec-10-ynoic acid, octyl ester				Stearic acid, TMS derivative
Undecanoic acid				Stearic anhydride
Urea, N-[5-(ethylsulfonyl)-1,3,4-t				Streptovitacin A
Urs-12-en-28-ol				Tartronic acid, 4-(dimethylethylsil
Z,Z,-4,6-Hexadecadiene				tert-Butyldimethylsilyl 2,3-dimeth
Z-11-Tetradecen-1-ol propionate				Tetracosamethyl-cyclododecasilox
				Tetrasiloxane, decamethyl-
				Thymol, TBDMS derivative
				Thymol, TMS derivative
				trans-2-Hexadecenoic acid
				trans-4-Hydroxycyclohexanecarbo
				trans-Traumatic acid
				Trichloroacetic acid, hex-4-yn-3-y
				Tricyclo[4.2.1.0(2,5)]non-7-ene, 3
				Tridecane, 4-methyl-
				Trimethylsilyl 3-methyl-4-[(trimet
				Trinexapac-ethyl, TMS derivative
				Tris(tert-butyldimethylsilyloxy)ars
				trisiloxane, 1,1,1,5,5,5-hexamethy
				Undecane, 2,4-dimethyl-
				Undecanoic acid
				Urea, N-[5-(ethylsulfonyl)-1,3,4-t
				Uridine, 5-heptafluoropropyl-
				Z,Z,Z-1,4,6,9-Nonadecatetraene
				Z-10-Tetradecen-1-ol acetate

REFERENCES

Ae, N., Arihara, J., Okada, K., Yoshihara, T., & Johansen, C. (1990). Phosphorus uptake by pigeon pea and its role in cropping systems of the Indian subcontinent. *Science*, *248*(4954), 477-480.

Appelqvist, L., Ohlson, R., & SPRAGUE, M. A. (1973). Rapeseed: Cultivation, composition, processing and utilization. *Soil Science*, *116*(6), 453.

Asseng, S., Aylmore, L., MacFall, J., Hopmans, J., & Gregory, P. (2000). Computer-assisted tomography and magnetic resonance imaging. In *Root methods* (pp. 343-363). Springer.

ATSDR, A. (2008). Toxicological profile for cadmium. US Department of Health and Human Services. *Public Health Service, Atlanta, GA*.

Bahmani, R., Kim, D. G., Kim, J. A., & Hwang, S. (2016). The density and length of root hairs are enhanced in response to cadmium and arsenic by modulating gene expressions involved in fate determination and morphogenesis of root hairs in Arabidopsis. *Frontiers in plant science*, *7*, 1763.

Begg, C., Kirk, G., Mackenzie, A., & Neue, H. U. (1994). Root-induced iron oxidation and pH changes in the lowland rice rhizosphere. *New Phytologist*, *128*(3), 469-477.

Bowen, G., & Rovira, A. (1991). The rhizosphere: the hidden half of the hidden half.

Cao, M., Fraser, K., Jones, C., Stewart, A., Lyons, T., Faville, M., & Barrett, B. (2017). Untargeted metabotyping Lolium perenne reveals population-level variation in plant flavonoids and alkaloids. *Frontiers in plant science*, *8*, 133.

Chain, E. P. o. C. i. t. F. (2012). Cadmium dietary exposure in the European population. *EFSA J.*, *10*, 2551.

Chaney, R. L., Reeves, R. D., Baklanov, I. A., Centofanti, T., Broadhurst, C. L., Baker, A. J., Van der Ent, A., & Roseberg, R. J. (2014). Phytoremediation and phytomining: using plants to remediate contaminated or mineralized environments. *Plant ecology and evolution in harsh environment. Nova Science Publishers, Hauppauge*, 365-392.

Checcucci, A., & Marchetti, M. (2020). The Rhizosphere Talk Show: The Rhizobia on Stage. *Frontiers in Agronomy*, *2*, 591494.

Clemens, S., Aarts, M. G., Thomine, S., & Verbruggen, N. (2013). Plant science: the key to preventing slow cadmium poisoning. *Trends in plant science*, *18*(2), 92-99.

DalCorso, G., Farinati, S., Maistri, S., & Furini, A. (2008). How plants cope with cadmium: staking all on metabolism and gene expression. *Journal of integrative plant biology*, *50*(10), 1268-1280.

Darrah, P. (1993). The rhizosphere and plant nutrition: a quantitative approach. *Plant and Soil*, *155*(1), 1-20.

Das, R., Bhattacherjee, C., & Ghosh, S. (2009). Preparation of mustard (Brassica juncea L.) protein isolate and recovery of phenolic compounds by ultrafiltration. *Industrial & engineering chemistry research*, *48*(10), 4939-4947.

de Oliveira, R. A., Ramos, M. M., & de Aquino, L. A. (2015). Irrigation Management. In *Sugarcane* (pp. 161-183). Elsevier.

Dietz, A. C., & Schnoor, J. L. (2001). Advances in phytoremediation. *Environmental health perspectives*, *109*(suppl 1), 163-168.

Fabre, N., Bon, M., Moulis, C., Fouraste, I., & Stanislas, E. (1997). Three glucosinolates from seeds of Brassica juncea. *Phytochemistry*, *45*(3), 525-527.

Farrell, K. (1999). Spices, Condiments and Seasonings. Gaithersburg. In: Aspen Publishers, Inc.

Feng, Z., Ji, S., Ping, J., & Cui, D. (2021). Recent advances in metabolomics for studying heavy metal stress in plants. *TrAC Trends in Analytical Chemistry*, *143*, 116402.

Filek, M., Keskinen, R., Hartikainen, H., Szarejko, I., Janiak, A., Miszalski, Z., & Golda, A. (2008). The protective role of selenium in rape seedlings subjected to cadmium stress. *Journal of Plant Physiology*, *165*(8), 833-844.

Flessa, H., & Fischer, W. (1992). Plant-induced changes in the redox potentials of rice rhizospheres. *Plant and Soil*, *143*(1), 55-60.

Florijn, P., & Van Beusichem, M. (1993). Uptake and distribution of cadmium in maize inbred lines. *Plant and Soil*, *150*(1), 25-32.

Foster, R. (1986). The ultrastructure of the rhizoplane and rhizosphere. *Annual Review of Phytopathology*, *24*(1), 211-234.

Gill, M. (2014). Heavy metal stress in plants: a review. *Int J Adv Res*, *2*(6), 1043-1055.

Gill, S. S., Khan, N. A., & Tuteja, N. (2012). Cadmium at high dose perturbs growth, photosynthesis and nitrogen metabolism while at low dose it up regulates sulfur assimilation and antioxidant machinery in garden cress (Lepidium sativum L.). *Plant Science*, *182*, 112-120.

Gonneau, C., Genevois, N., Frérot, H., Sirguey, C., & Sterckeman, T. (2014). Variation of trace metal accumulation, major nutrient uptake and growth parameters and their correlations in 22 populations of Noccaea caerulescens. *Plant and Soil*, *384*(1), 271-287.

Greger, M., & Löfstedt, M. (2004). Comparison of uptake and distribution of cadmium in different cultivars of bread and durum wheat. *Crop Science*, *44*(2), 501-507.

Haghiri, F. (1973). *Cadmium uptake by plants* (0047-2425).

Haider, F. U., Liqun, C., Coulter, J. A., Cheema, S. A., Wu, J., Zhang, R., Wenjun, M., & Farooq, M. (2021). Cadmium toxicity in plants: Impacts and remediation strategies. *Ecotoxicology and Environmental Safety*, *211*, 111887.

Hassan, Z., & Aarts, M. G. (2011). Opportunities and feasibilities for biotechnological improvement of Zn, Cd or Ni tolerance and accumulation in plants. *Environmental and Experimental Botany*, *72*(1), 53-63.

Higdon, J. V., Delage, B., Williams, D. E., & Dashwood, R. H. (2007). Cruciferous vegetables and human cancer risk: epidemiologic evidence and mechanistic basis. *Pharmacological research*, *55*(3), 224-236.

Hill, C. B., Williams, P. H., Carlson, D. G., & Tookey, H. (1987). Variation in glucosinolates in oriental Brassica vegetables.

Hinsinger, P. (1998). How do plant roots acquire mineral nutrients? Chemical processes involved in the rhizosphere. *Advances in agronomy*, *64*, 225-266.

Jamla, M., Khare, T., Joshi, S., Patil, S., Penna, S., & Kumar, V. (2021). Omics approaches for understanding heavy metal responses and tolerance in plants. *Current Plant Biology*, *27*, 100213.

John, M. K., Chuah, H. H., & VanLaerhoven, C. J. (1972). Cadmium contamination of soil and its uptake by oats. *Environmental science & technology*, *6*(6), 555-557.

Jones, D. L., Darah, P. R., & Kochian, L. V. (1996). Critical evaluation of organic acid mediated iron dissolution in the rhizosphere and its potential role in root iron uptake. *Plant and Soil*, *180*(1), 57-66.

Jones, D. L., & Darrah, P. R. (1994). Role of root derived organic acids in the mobilization of nutrients from the rhizosphere. *Plant and Soil*, *166*(2), 247-257.

Jung, H. A., Woo, J. J., Jung, M. J., Hwang, G.-S., & Choi, J. S. (2009). Kaempferol glycosides with antioxidant activity from Brassica juncea. *Archives of pharmacal research*, *32*(10), 1379-1384.

Kuchenbuch, R., & Jungk, A. (1982). A method for determining concentration profiles at the soil-root interface by thin slicing rhizospheric soil. *Plant and Soil*, *68*(3), 391-394.

Kuijken, R. C., van Eeuwijk, F. A., Marcelis, L. F., & Bouwmeester, H. J. (2015). Root phenotyping: from component trait in the lab to breeding. *Journal of experimental botany*, *66*(18), 5389-5401.

Kumar, R., Bohra, A., Pandey, A. K., Pandey, M. K., & Kumar, A. (2017). Metabolomics for plant improvement: status and prospects. *Frontiers in plant science*, *8*, 1302.

Lagerwerff, J. (1971). Uptake of cadmium, lead and zinc by radish from soil and air. *Soil Science*, *111*(2), 129-133.

Lane, T. W., Saito, M. A., George, G. N., Pickering, I. J., Prince, R. C., & Morel, F. M. (2005). A cadmium enzyme from a marine diatom. *Nature*, *435*(7038), 42-42.

Laporte, M.-A., Sterckeman, T., Dauguet, S., Denaix, L., & Nguyen, C. (2015). Variability in cadmium and zinc shoot concentration in 14 cultivars of sunflower (Helianthus annuus L.) as related to metal uptake and partitioning. *Environmental and Experimental Botany*, *109*, 45-53.

Lewis, D., & Quirk, J. (1967). Phosphate diffusion in soil and uptake by plants. *Plant and Soil*, *26*(1), 99-118.

Li, J., HO, C. T., Li, H., Tao, H., & TAO, L. (2000). Separation of sterols and triterpene alcohols from unsaponifiable fractions of three plant seed oils. *Journal of Food Lipids*, *7*(1), 11-20.

Luo, Q., Wang, S., Sun, L.-n., & Wang, H. (2017). Metabolic profiling of root exudates from two ecotypes of Sedum alfredii treated with Pb based on GC-MS. *Scientific reports*, *7*(1), 1-9.

Lynch, J. (1990). The Rhizosphere Wiley Interscience. *Chichester, England*.

Lynch, J. M., Brimecombe, M. J., & De Leij, F. A. (2001). Rhizosphere. *e LS*.

Lynch, J. P. (2007). Turner review no. 14. *Roots of the Second Green Revolution*.

Manohar P, R., Pushpan, R., & Rohini, S. (2009). Mustard and its uses in Ayurveda.

Marschner, H., Römheld, V., Horst, W., & Martin, P. (1986). Root-induced changes in the rhizosphere: Importance for the mineral nutrition of plants. *Zeitschrift für Pflanzenernährung und Bodenkunde*, *149*(4), 441-456.

McNaughton, S., & Marks, G. (2003). Development of a food composition database for the estimation of dietary intakes of glucosinolates, the biologically active constituents of cruciferous vegetables. *British Journal of Nutrition*, *90*(3), 687-697.

Passioura, J. (1988). Water transport in and to roots. *Annual Review of Plant Physiology and Plant Molecular Biology*, *39*(1), 245-265.

Paton, G., Rattray, E., Campbell, C., Cresser, M., Glover, L., Meeuseen, J., & Killham, K. (1997). Use of genetically modified microbial biosensors for soil ecotoxicity testing.

Prasad, M. N. V. (2001). *Metals in the environment: analysis by biodiversity*. CRC Press.

Qian, F., Huang, X., Su, X., & Bao, Y. (2022). Responses of microbial communities and metabolic profiles to the rhizosphere of Tamarix ramosissima in soils contaminated by multiple heavy metals. *Journal of Hazardous Materials*, 129469.

Qing, L., Li-Na, S., & Xiao-Min, H. (2015). Metabonomics study on root exudates of cadmium hyperaccumulator Sedum alfredii. *Chinese Journal of Analytical Chemistry*, *43*(1), 7-12.

Raza, A., Habib, M., Kakavand, S. N., Zahid, Z., Zahra, N., Sharif, R., & Hasanuzzaman, M. (2020). Phytoremediation of cadmium: physiological, biochemical, and molecular mechanisms. *Biology*, *9*(7), 177.

Römheld, V. (1991). The role of phytosiderophores in acquisition of iron and other micronutrients in graminaceous species: an ecological approach. In *Iron nutrition and interactions in plants* (pp. 159-166). Springer.

Sang, J., Minchinton, I., Johnstone, P., & Truscott, R. (1984). Glucosinolate profiles in the seed, root and leaf tissue of cabbage, mustard, rapeseed, radish and swede. *Canadian Journal of Plant Science*, *64*(1), 77-93.

Schnoor, J. L., Light, L. A., McCutcheon, S. C., Wolfe, N. L., & Carreia, L. H. (1995). Phytoremediation of organic and nutrient contaminants. *Environmental science & technology*, *29*(7), 318A-323A.

Shakoor, A., Abdullah, M., Sarfraz, R., Altaf, M. A., & Batool, S. (2017). A comprehensive review on phytoremediation of cadmium (Cd) by mustard (Brassica juncea L.) and sunflower (Helianthus annuus L.). *J Bio Env Sci*, *10*, 88-98.

Shanmugaraj, B. M., Chandra, H. M., Srinivasan, B., & Ramalingam, S. (2013). Cadmium induced physio-biochemical and molecular response in Brassica juncea. *International journal of phytoremediation*, *15*(3), 206-218.

Šimonová, E., Henselová, M., Masarovičová, E., & Kohanová, J. (2007). Comparison of tolerance of Brassica juncea and Vigna radiata to cadmium. *Biologia Plantarum*, *51*(3), 488-492.

Singh, S., Parihar, P., Singh, R., Singh, V. P., & Prasad, S. M. (2016). Heavy metal tolerance in plants: role of transcriptomics, proteomics, metabolomics, and ionomics. *Frontiers in plant science*, *6*, 1143.

Six, L., & Smolders, E. (2014). Future trends in soil cadmium concentration under current cadmium fluxes to European agricultural soils. *Science of the Total Environment*, *485*, 319-328.

Smolders, E., Brans, K., Földi, A., & Merckx, R. (1999). Cadmium fixation in soils measured by isotopic dilution. *Soil Science Society of America Journal*, *63*(1), 78-85.

Sposito, G. (2008). *The chemistry of soils*. Oxford university press.

Sterckeman, T., Gossiaux, L., Guimont, S., Sirguey, C., & Lin, Z. (2018). Cadmium mass balance in French soils under annual crops: scenarios for the next century. *Science of the Total Environment*, *639*, 1440-1452.

Tan, P., Zeng, C., Wan, C., Liu, Z., Dong, X., Peng, J., Lin, H., Li, M., Liu, Z., & Yan, M. (2021). Metabolic profiles of Brassica juncea roots in response to cadmium stress. *Metabolites*, *11*(6), 383.

Tarafdar, J., & Jungk, A. (1987). Phosphatase activity in the rhizosphere and its relation to the depletion of soil organic phosphorus. *Biology and Fertility of Soils*, *3*(4), 199-204.

Tripathi, P., Subedi, S., Khan, A. L., Chung, Y.-S., & Kim, Y. (2021). Silicon effects on the root system of diverse crop species using root phenotyping technology. *Plants*, *10*(5), 885.

Verbruggen, N., Hermans, C., & Schat, H. (2009). Molecular mechanisms of metal hyperaccumulation in plants. *New phytologist*, *181*(4), 759-776.

Wasson, A., Richards, R., Chatrath, R., Misra, S., Prasad, S. S., Rebetzke, G., Kirkegaard, J., Christopher, J., & Watt, M. (2012). Traits and selection strategies to improve root systems and water uptake in water-limited wheat crops. *Journal of experimental botany*, *63*(9), 3485-3498.

Wollenweber, B. (1997). A sensitive computer-controlled pH-stat system allows the study of net H+ fluxes related to nitrogen uptake of intact plants in situ. In: Wiley Online Library.

Yokozawa, T., Kim, H. Y., Cho, E. J., Choi, J. S., & Chung, H. Y. (2002). Antioxidant effects of isorhamnetin 3, 7-di-O-β-D-glucopyranoside isolated from mustard leaf (Brassica juncea) in rats with streptozotocin-induced diabetes. *Journal of agricultural and food chemistry*, *50*(19), 5490-5495.

Young Kim, H., Yokozawa, T., Ju Cho, E., Sik Cheigh, H., Sue Choi, J., & Young Chung, H. (2003). In vitro and in vivo antioxidant effects of mustard leaf (Brassica juncea). *Phytotherapy Research*, *17*(5), 465-471.

YU, J. C., Jiang, Z.-T., Li, R., & Chan, S. M. (2003). Chemical Composition of the Essential Oils of Brassica juncea (L) CossGrown in Different Regions, Hebei, Shaanxi and Shandong, of China. *Journal of Food and Drug Analysis*, *11*(1).

Zemanová, V., Pavlík, M., Pavlíková, D., & Kyjaková, P. (2015). Changes in the contents of amino acids and the profile of fatty acids in response to cadmium contamination in spinach. *Plant, Soil and Environment*, *61*(6), 285-290.

Zeng, C., Lin, H., Liu, Z., & Liu, Z. (2020). Metabolomics analysis of Camellia sinensis with respect to harvesting time. *Food Research International*, *128*, 108814.

Zhang, Y., Zeng, H., Dong, X., Huang, H., Zheng, Q., Dai, Z., Zhang, Z., Li, Z., Feng, Q., & Xiong, S. (2021). In situ cadmium removal from paddy soils by a reusable remediation device and its health risk assessment in rice. *Environmental Technology & Innovation*, *23*, 101713.