

a caste-specific substance present in the mandibular glands of male ants in the genus *Camponotus*
aerial parts of *Asterolasia trynalioides*, from stems of the plant *Metrodorea flavida*
aggregation pheromone component of the bark beetle, *Ips paraconfusus*
aggregation pheromone of the red flour beetle, *Tribolium castaneum*, and of the confused beetle, *Tribolium confusum*
aglycone of asiaticoside isolated from the plant *Centella asiatica*
component of the aggregation pheromone of the southern pine beetle, *Dendroctonus frontalis*Zimmerman, and western pine beetle, *Dendroctonus brevicomis* [Le Conte]
component of the alarm pheromone system of *Piezodorus guildinii*, a member of the stinkbug complex in soybeans that is an economically important pest in Brazil
component of the pheromone blend of the carpenter bee, *Xylocopa hirtissima*
component of the queen recognition pheromone of the fire ant *Solenopsis invicta*
component of the sex pheromone of the fall armyworm, *Spodoptera frugiperda*, an important economic pest of maize and other grass crops in North, Central, and parts of South America
component of the sex pheromone of the Mediterranean fruit fly, *Ceratitis capitata*
component of the sex pheromone of the sugar cane borer, *Diatraea saccharalis*, an economically important pest distributed from Argentina to Cuba
components of the male-produced sex pheromones of the stink bugs, *Euschistus heros* and *Euschistus obscurus*
female sex pheromone of the yellowish elongate chafer, *Heptophylla picea*
from plants, including *Veratrum californicum*, the eggplant (*Solanum melongeta*), and tomato (*Lycopersicon esculentum*)
found in oceans
from 29 species of macroalgae
from a *Bacillus* sp., obtained from mud near the Arctic pole
from a bacterial *Ruegeria* species, associated with cell cultures of a sponge *Suberites domuncula* (Gulf of Naples, Italy).
from a bright yellow encrusting marine Aplysillid sponge, tentatively identified as *Aplysilla sulfurea* from S. E. Queensland
from a *Cladosporium* species, from the brown alga *Actinotrichia fragilis* (Okinawa, Japan)
from a culture of *Nocardia* sp. WW-12651 (ATCC 202099)
from a deep water green pre-Antarctic sponge
from a deep-water marine sponge of the family *Astroscleridae*
from a deep-water marine sponge of the genus *Batzella*
from a dinoflagellate *Amphidinium* species, isolated from an acoel flatworm *Amphiscolops* species (Sunabe, Okinawa)
from a dinoflagellate *Amphidinium* species, originally isolated from the surface wash of seaweeds (Lingshui Bay, Hainan Province, China)
from a *Dysidea* sp. sponge
from a European horticultural plant
from a fermentation broth of *Streptomyces nitrosporeus* K93-0711
from a fermentation broth of *Streptomyces* sp. HKI0231
from a freshwater fungus *Paraniesslia* sp.
from a Gram-positive *Bacillus* sp.; the compound fluoresces
from a *Leptosphaeria* species
from a *Luffariella* sp. sponge collected in Palau
from a Malayan *Alstonia* species
from a marine deep-sea *Actinomycetes* sp.
from a marine organism
from a marine sponge from Indonesia
from a marine-derived *Aspergillus niger*
from a mixed culture of two *Penicillium corylophilum* strains, (deep water sediment, Fiji/Matuka),
from a new genus of Kenyan soft coral
from a new species of the marine coelenterate *Sarcophyton* (Great Barrier Reef)
from a North Sea bacterium that is closely related to *Vibrio parahaemolyticus*
from a *Penicillium* species, from a sponge *Axinella verrucosa* (Elba, Italy)
from a sponge of the *Demospongiae* family
from a sponge-derived culture of *Aspergillus niger*
from a strain of *Periconia byssoides*, originating from *Aplysia kurodai*
from a strain of *S. aureoverticillatus*
from a strain of the marine fungus *Emericella unguis*
from a *Streptomyces* species isolated from sediment (Laguna de Terminos, Gulf of Mexico).
from a *Streptomyces* species, from mangrove sediment (Papua New Guinea)
from a Sumatran toadstool that resembles *Cortinarius violaceus*
from a *Symbiodinium* species, isolated in the free-living state from a Hawaiian tide pool
from a symbiotic dinoflagellate *Symbiodinium* species, from an acoel flatworm *Amphiscolops* species
from a *Symploca* species (Fingers Reef, Guam)
from a Vancouver Island sponge
from a Vanuatu marine sponge *Xestospongia* sp.
from a variety of fungi
from a variety of fungi including *Nectria radicola*, *Monosporium bonorden*, *Penicillium luteoaurantium*, *Chaetomium chiversii*
from a variety of fungi, including *Aspergillus niger*

from a variety of organisms, including Hyfrangea macrophylls (Saxifragaceae)
 from a variety of Penicillium sp., including P. crustosum, P. brevicompactum, P. chrysogenum, P. expansum, P. roqueforti, P. spinulosum, P. viridicatum, P. commune, P. citrinum, and P. solitum
 from a variety of plant genera, including Abuta, Anisocycla, Cyclea, Isolona, Pachygone, Spirospermum, Stephania, Strychnopsis, Tliacora, Tinospora, and Triclisia sp.
 from a variety of plant genera, including Abuta, Anisocycla, Cyclea, Pachygone, Spirospermum, Stephania, Strychnopsis, Tliacora, Tinospora, and Triclisia sp.
 from a variety of plant sources, such as Phalaris tuberosa and Horsfieldia superba
 from a variety of plants
 from a variety of plants including Haplophyllum sp., Arctium lappa
 from a variety of plants including Haplophyllum sp., Hibiscus tiliaceus, Zanthoxylum integrifoliolum
 from a variety of plants including Haplophyllum sp., Hibiscus tiliaceus, Zanthoxylum integrifoliolum, from Phellodendron amurense
 from a variety of plants including Vernonia brasiliiana, from stem wood and leaves of Hibiscus tiliaceus, and stem wood from Zanthoxylum integrifoliolum
 from a variety of plants of the Haplophyllum sp.
 from a variety of plants, including Azadirachta indica, Cedrela odorata, Guarea multiflora
 from a variety of plants, including Azadirachta indica, Cedrela odorata, Guarea multiflora, Khaya grandifoliola
 from a variety of plants, including Hibiscus tiliaceus and stem wood from Zanthoxylum integrifoliolum, Haplophyllum sp., Metrodorea flavida
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 from a variety of species, including Tolypocladium inflatum (formerly named Trichoderma polysporum), Fusarium solani, Cy lindrocarpon lucidum
 from a xylariaceous fungus isolated from a Nypa (mangrove) palm frond (Kuala Selangor, Malaysia)
 from Acanthosyris paulo-alvini
 from Aciculosporium take (Ascomycota; Clavicipitaceae), which causes the witches' broom disease in bamboo sp., particularly Phyllostachys bambusoides
 from Aconitum and Delphinium sp. plants
 from Aconitum bulleyanum Diel
 from Aconitum gymnandrum
 from Aconitum karakolicum Rap.
 from Acremonium striatisporum originating, from the holothurian Eupentacta fraudatrix (Kitovoe Rebro Bay, Sea of Japan)
 from Acrodontium salmoneum
 from Actinomadura madurae
 from Actinomycetes sp.
 from Actinomycetes strain
 from Actinoplanes philippinensis
 from Actinoplanes teichomyceticus
 from Actinomadura madurae
 from aerial parts of Boronia algida
 from aerial parts of Chorilunea quercifolia
 from aerial parts of Diplolophium buchananii
 from aerial parts of Ducrosia israaelis
 from aerial parts of Eriostemon cymbiformis
 from aerial parts of Eriostemon myoporoides
 from aerial parts of Haplophyton crooksii
 from aerial parts of Pterocaulon alopecuroides
 from aerial parts of Stelleria charnaejasmoside
 from aerial parts of the evergree shrub Skimmia laureola, found in the western Himalayas and Kashmir
 from aerial parts of the plant Bocconia arborea (Papaveraceae)
 from aerial parts of the plant Chorilaena quercifolia
 from aerial parts of the plant Ephedra transitoria (Ephedracea)
 from aerial parts of the plant Hypericum calycinum
 from aerial parts of the plant Latua pubiflora from Chile
 from aerial parts of the plant Peganum nigellsatrum
 from aerial parts of the plant Xanthium strumarium
 from aerial parts of the plant Xanthium strumarium (Compositae)
 from aerial parts of the South African plant Oncosiphon piluliferum (Asteraceae)
 from African trees of the genus Acacia, especially A. senegal
 from Agrimonia pilosa Ledeb.
 from Aigialus parvus, isolated from mangrove wood (Thailand)
 from Aistolochia sp.
 from Ajuga parviflora
 from Alexandrium tamarense
 from Alisma orientale
 from Alternaria sp
 from Alternaria sp.

from Amaryllidaceae plants
from amber, resembling the tree *Hymenaea oblongifolia*
from *Amycolatopsis mediterranei*
from *Amycolatopsis* sp.
from an ascidian from the family Didemnidae (Okinawa)
from an *Aspergillus* species isolated from a red alga *Lomentaria catenata* (Ulsan City, Korea)
from an unnamed New Zealand fungus *Cortinarius* sp.
from an imperfect fungus, strain D1084 that belongs to *Mycelia sterilia*
from an Okinawan verongid sponge
from an undescribed Verongid sponge from Molokai
from an unidentified ascidian of the family Polyclinidae (Spain)
from an unidentified ascomycete belonging to the Dermateaceae family
from an unidentified Dictyoceratid marine sponge from Papua New Guinea
from an unidentified New Zealand ascidian
from an unidentified surface fungus isolated from the brown alga *Ishige okamurae* (Tateishi, Japan)
from an unidentified surface fungus of the red alga *Gracillaria verrucosa* (Jinha, Korea).
from an unnamed fungus *Ganoderma* species collected in Sumatra
from *Ancistrocladus tectorius*
from *Andrographis paniculata*
from *Angelicae dahuricae*
from *Anisotes trisulcus*
from *Annona cherimola* (Annonaceae)
from *Anopterus macleayanus* (Escaloniaceae)
from Antarctic macroalgae
from *Antirhea lucida*
from *Anvillea garcinii*
from *Apiospora montagnei*, isolated from the inner tissue of the alga *Polysiphonia violacea* (North Sea near Helgoland)
from *Aplysia fasciata*
from *Aplysia punctata* in Spain
from *Aplysina fistularis insularis*
from *Araliopsis tabouensis*
from *Arctium lappa*
from *Arnica montana*
from *Arundo donax*
from *Aspergillus clavatus*
from *Aspergillus fumigatus*
from *Aspergillus fumigatus*, and *Penicillium nigricans*
from *Aspergillus melleus*
from *Aspergillus niger*, isolated from a sponge *Axinella damicornis* (near Elba, Italy)
from *Aspergillus pseudodeflectus*, isolated from an alga *Sargassum fusiform* (Miura Peninsula, Japan),
from *Aspergillus* sp.
from *Aspergillus* sp., strain IMI-337664
from *Aspergillus terreus*
from *Aspergillus terreus* occurring in the rhizosphere of *Opuntia versicolor*
from *Aspergillus tubingensis*
from *Aspergillus ustus*
from *Aspidosperma subincanum*
from *Atractylodes* plants
from Australian and New Zealand *Dermocybe* sp.
from Australian sponges *Spongia* sp.
from *Azadirachta excelsa*
from *Bacillus cereus*
from *Bacillus megaterium*
from *Bacillus polymyxa* var. *colistinus*
from bacteria
from bacteria associated with the lithistid sponge *Theonella swinhoei* from Palau and Mozambique
from bacteria *Micromonospora* spp.
from bark and leaves of *Peripentadenia mearsii* and *Peripentadenia phelpsii*, rainforest trees which grow in north Queensland
from bark and leaves of the South American tree *Peumus boldus*
from bark and roots of the bushy plant *Peschiera campestris* from Brazil
from bark and roots of the bushy plant *Peschiera campestris* from Brazil, from the plant *Tabernaemontana divaricata* (Apocynaceae),
common in gardens in tropical countries
from bark and seed of the plant *Khaya grandifoliola*
from bark and seeds of the plant *Peschiera fuchsiaefolia*
from bark and seeds of the plant *Peschiera fuchsiaefolia*, from bark and roots of *P. campestris* from Brazil
from bark and seeds of the plant *Peschiera fuchsiaefolia*, from the plant *Tabernaemontana laeta* [Mart.]. (Apocynaceae)

from bark of *Enantia chlorantha* (Annonaceae)
from bark of *Hernandia nymphaeifolia*
from bark of *Strychnos guaianensis* (Aubl.) Mart., collected at Manaus (Brazil)
from bark of the Bolivian plant *Pogonopus tubulosus* (Rubiaceae)
from bark of the Brazilian trees *Xylopia amazonica* and *X. aromatica*
from bark of the plant *Garcinia cowa*
from bark of the plant *Garcinia dulcis*
from bark of the plant *Physena madagascariensis* (Capparaceae)
from bark of the plant *Pogonopus tubulosus*
from bark of the plant *Pogonopus tubulosus* (Rubiaceae)
from bark of the plant *Simaba cedron*
from bark of the plant *Simaba guaianensis*
from basidiomycetes fungi, found in *Bjerkandera* sp. and *Peniophora* sp.
from *Bauhinia variegata* (Leguminosae)
from bearberry leaves, *Arctostaphylos uva-ursi*
from berries of the plant *Juniperus sabina*
from *Bjerkandera adusta*
from *Bjerkandera* sp.
from *Bjerkandera* sp. BO555 and *B. fumosa*
from black shales found in Central Asia
from bog water and sediment samples
from *Boswellia serrata*
from both the ascomycete *Chlorosplenium* sp.
from both the fruit bodies of the common puff ball *Scleroderma citrinum*
from branches of *Clausena anisata*
from broccoli
from bulbs and leaves of the Amazon lily, *Eucharis amazonica*
from bulbs of the Egyptian plant *Amaryllis belladonna* (Amaryllidaceae)
from bulbs of the plant *Ammocharis tinneana*
from bulbs of the plant *Ammocharis tinneana*, also from *Sceletium* sp.
from bulbs of the plant *Ammocharis tinneana*, and from leaves of *Crinum latifolium*
from bulbs of the plant *Ammocharis tinneana*; from the south African plant *Nerine filifolia* (Amaryllidaceae)
from bulbs of the plant *Brunsvigia littoralis*
from bulbs of the plant *Brunsvigia radulosa*
from bulbs of the plant *Crinum bulbipsermum*
from bulbs of the plant *Crinum kirkii*
from bulbs of the plant *Cyrtanthus elatus*
from bulbs of the plant *Cyrtanthus obliquus*
from bulbs of the plant *Hippeastrum equestre*
from bulbs of the plant *Hymenocallis littoralis*
from bulbs of the plant *Lycoris aurea*
from bulbs of the plant *Sprekelia formosissima*
from bulbs of the plant *Sprekelia formosissima* , from the plant *Narcissus bulbocodium*
from bulbs of the plant *Sprekelia formosissima*, and from bulbs of the plant *Hippeastrum equestre*
from bulbs of the plant *Zephyranthes citrina*
from bulbs of the plants *Crinum amabile* (Amaryllidaceae), *Brunsvigia littoralis* (Amaryllidaceae)
from bulbs of the plants *Crinum amabile*, *Brunsvigia littoralis*
from calabar beans
from *Calophyllum lanigerum*
from *Calophyllum* sp.
from *Calothrix* sp. cyanobacteria
from Canadian peat bogs
from *Carica papaya* L.
from *Catalpae fructus*
from *Catharantus roseus*
from catnip plant (*Nepeta cataria*)
from *Celastrus hindsii*
from *Centaurea malacitana*
from *Centaurea scoparia*
from *Cephalotaxus harringtonii*
from *Cephalotaxus* sp.
from *Cercospora beticola*
from *Cercospora traversiana*
from *Chaetomium* sp.
from chasteberry (*Vitex agnus castus*)
from *Chrysanthemum morifolium*

from *Cistanche deserticola*
from citrus plants
from citrus plants, from stem bark and roots of the plant *Murraya koenigii* (Rutaceae)
from citrus plants; from *Bleekeria coccinea*, from *Ochrosia moorei* (Apocynaceae)
from *Clitocybe elegans*
from coca leaves
from cod liver oil
from *Colchicum autumnale* (Liliaceae)
from *Combretum caffrum*
from *Coniochaeta tetraspora*
from *Coprinus comatus*
from corms and flowers of *Colchicum autumnale*
from *Corydalis incisa*, and *Corydalis ambigua*
from *Coscinoderma* sp.

from cotton seeds (*Gossypium* sp.), from stem wood and leaves of *Hibiscus tiliaceus* and stem wood of *Zanthoxylum integrifolium*
from *Covallaria majalis* (plant: Lily of the Valley)
from *Crinum latifolium* (Amaryllidaceae)
from cruciferous plants
from cruciferous vegetables
from *Cryptocarya pleurosperma* (Lauraceae)
from cultivated mycelium of *Axinella flavipes*, isolated from the sea anemone *Anthopleura xanthogrammica* (Qingdao Bay, eastern China Sea)
from culture broth of *Nocardioopsis* sp.
from culture broth of *Streptomyces* sp.
from culture filtrates of *Streptomyces lydicus*
from culture filtrates of the plant *Cochliobolus heterostrophus*
from cultures of *Actinomyces flavochromogenes* var. *heliomycini*
from cultures of *Amycolatopsis* sp. Y-86,21022
from cultures of *Amycolatopsis* sp. Y-86,21023
from cultures of *Amycolatopsis* sp. Y-86,21024
from cultures of *Amycolatopsis* sp. Y-86,21025
from cultures of *Amycolatopsis* sp. Y-86,21026
from cultures of *Amycolatopsis* sp. Y-86,21027
from cultures of *Chromobacterium violaceum*
from cultures of *Gliocladium catenulatum*
from cultures of *Streptomyces aculeolatus* from a Palau soil sample
from cultures of *Streptomyces cattleya*
from cultures of the blue-green alga *Fischerella ambigua*
from cultures of the endophytic fungus *Pestalotiopsis microspora*, commonly found in rain forests
from cultures of the fungus *Drechslera avenae*
from cultures of the slime mould *Didymium bahiense*
from cultures of the terrestrial cyanobacterium *Scytonema hofmanni*
from *Curvularia lunata*
from cyanobacteria
from cyanobacterium *Microcystis aeruginosa*
from cyanobacterium *Nostoc spongiaeforme* var. *tenue*
from *Cylindrocarpon olidum*
from *Cynomorium songaricum*
from *Cytophaga* sp. strain AM1360
from *Cytospora* sp.
from *Daldinia concentrica*
from *Daphniphyllum macropodum*
from *Dendropanax arboreus* (Araliaceae)
from dinoflagellates
from *Dolabella auricularia*
from *Drechslera dematoidea*
from East African herbal plant *Vernonia brachycalyx*
from *Echinacea pupurea*
from egg masses of the nudibranch *Hexabranchnus sanguineus*
from *Emericella falconensis* and *E. fruticulosa*
from *Emericella variegata*, (marine sediment, Gokasyo Gulf, Japan)
from *Ernericella desertorum*
from *Erythrina brucei*
from *Exserohilum rostratum*, a fungal strain associated with a marine cyanobacterial mat (Lanai, Hawaii)
from extracts of *Lolium perenne* (perennial ryegrass) seed infected with the endophytic fungus *Neotyphodium lolii*

from fermentation extracts of *Penicillium simplicissimum* and *Aspergillus aculeatus* cultured on okara
from fermentation of terreusinone with *Streptomyces* sp.
from fermentations of a *Nodulisporium* sp.
from fermentations of *Streptomyces rimosus*
from *Fissistigma glaucescens* (Annonaceae)
from flowers of *Pancreaticum maritimum*
from flowers of the plant *Lycoris incarnata*, also from *Galanthus elwesii* (Amaryllidaceae)
from fresh leaves and fruits of two species of Egyptian *Schinus molle* and *S. terebinthifolius*
from from the egg masses of Spanish and Chilean collections of *Trunculariopsis trunculus*, *Ceratostoma erinaceum* and *Trophon geversianus*
from fruit bodies of the fungi *Paxillus involutus* and *Chamonixia caespitosa*
from fruit bodies of the fungus *Daldinia concentrica*
from fruit bodies of the fungus *Hypoxylon truncatum*
from fruit bodies of the fungus *Hypoxylon truncatum* from Japan
from fruit bodies of the fungus *Polyozellus multiplex*
from fruit bodies of the fungus *Pulveroboletus ravenelii*
from fruit bodies of the fungus *Thelephora ganbajun*
from fruit of the Chinese plant *Tribullus terrestris*
from fruit of the plant *Brucea javanica*
from fruit rind of the plant *Terminalia bellerica*
from fruiting bodies of the mushroom *Mycena sanguinolenta*
from fruits of *Ammi visnaga*
from fruits of *Angelica edulis*
from fruits of *Gardenia jasminoides* [J. Ellis] (Rubiaceae)
from fruits of *Haplophyllum foliosum*
from fruits of the Cameroon plant *Reneilimia cincinnata* (Zingiberaceae)
from fruits of the medicinally important plant *Evodia rutaecarpa*
from fruits of the Panamanian plant *Simarouba amara*
from fungus *Coprinus* sp.
from fungus *Penicillium multicolor* and *P. sclerotiorum*
from fungus *Phomopsis asparagi*
from *Fusarium equiseti* isolated from a soybean cyst nematode (*Heterodera glycines*)
from *Fusarium orthoceras*
from *Fusarium* sp.
from *Fusicoccum amygdali*
from *Galanthus plicatus* ssp. *byzantinus* (Amaryllidaceae)Amaryllidaceae), a plant native to northwestern Turkey
from *Galaxaura marginata*
from *Galbulimima belgraveana*
from gametophytes of *Tetraphis pellucida*
from *Garcinia parvifolia* (Guttiferae)
from garlic
from *Gelsemium elegans* [Benth.]
from *Gelsemium elegans*, grown in the Guangxi Province of China
from *Ginkgo biloba*
from *Gmelina arborea*
from green tea
from *Guatteria* sp. (Annonaceae)
from *Guatteria* sp. (Annonaceae), from seeds of the plant *Zizyphus vulgaris* (Rhamnaceae), and *Z. jujuba*
from *Halichondria okadae*, and also from the sponges *Axinella* sp. from the western Pacific, and *Phakellia carteri* from the East Indian Ocean
from *Haplophyllum buxbaumii* (Rutaceae), a yellowish-green perennial herb which is widespread in northern Jordan
from *Hedyotis capitellata*
from *Hedyotis chrysotricha*, used in traditional Chinese medicine
from *Helleborus* sp. (plant: Christmas rose)
from *Helminthosporium dematioideum*
from hemlock water dropwort
from *Heterbasidion annosum*
from *Hibiscus syriacus*
from *Holarrhena curtisii* (Apocynaceae)
from *Holarrhena floribunda* (Apocynaceae)
from *Holarrhena* sp. (Apocynaceae)
from hops
from *Humicola fuscoatra*, associated with an unidentified colonial ascidian (Shikotan Is., Kuril Isles)
from hybrids of *Rauwolfia serpentina* and *Rhazya stricta*
from *Hydrastis canadensis* L. (Berberidaceae)
from *Hyfrangea macrophylls* (Saxifragaceae)

from *Hypholoma fasciculare*
from *Hypomyces* sp.
from Indian dill (*Anethum sowa*)
from infectious disease organism of sweet potato
from injured fruiting bodies of mushrooms such as *Lactarius vellereus*, *Russula cuprea*
from inner stem bark of the plant *Tabebuia ochracea*
from *Inula britannica*
from *Irpex lacteus*
from *Isatis indigotica*, and *Peganum multisectum*
from *Isatis tinctoria*
from *Isodon xerophilis* (Labiatae)
from *Jaborosa odonelliana*
from *Kassina senegalensis* (Senegal running frog)
from *Kopsia griffithii*
from *Kopsia pauciflora* [Hook f.], from Sabah (North Borneo)
from *Kuehneromyces mutabilis*
from laboratory cultures of *Karenia brevis* as well as collections off the west coast of Florida during a red tide event
from *Lactobacillus reuteri*
from *Latrunculiidae* sponges
from *Laurencia japonensis*
from *Laurencia microcladia* from the coast of Tuscany
from *Laurencia microcladia*, found at the coast of Tuscany, Italy
from *Laurencia nidifica*
from *Laurencia obtusa*
from *Laurencia obtusa*
from *Laurencia* sp.
from *Laurencia viridis*
from leaves and bark of the plant *Dehaasia incrassata*
from leaves and stem of the plant *Raphidophora decursiva* (Araceae)
from leaves and stems of the plant *Toona ciliate*
from leaves and tubers of the plant *Ancistrocladus korupensis*
from leaves and twigs of *Calophyllum teysmanii*
from leaves of *Angelica shikokiana*
from leaves of *Chimarrhis turbinata*
from leaves of *Ferula oopoda* (Umbelliferae)
from leaves of feverfew, *Tanacetum parthenium*
from leaves of *Lippia multiflora* (Verbenaceae)
from leaves of *Rauwolfia sprucei* [Muell.-Arg.] from Peru
from leaves of the Brazilian plant *Almeidia coerulea*
from leaves of the Himalayan fir *Abies webbiana* (Pinaceae)
from leaves of the Philippine medicinal plant *Alstonia scholaris*
from leaves of the Philippine medicinal plant *Alstonia scholaris*, from the plant *Tabernaemontana divaricata* (Apocynaceae), common in gardens in tropical countries
from leaves of the plant *Alstonia macrophylla* from Sri Lanka
from leaves of the plant *Ancistrocladus likoko*
from leaves of the plant *Aristolochia cucurbitifolia*
from leaves of the plant *Azadirachta indica*
from leaves of the plant *Buxus hilderbrandtii* from Ethiopia
from leaves of the plant *Buxus papilose* from Pakistan
from leaves of the plant *Buxus sempervirens* from Turkey
from leaves of the plant *Cassia siamea* (Leguminosae)
from leaves of the plant *Daphniphyllum macropodum*
from leaves of the plant *Dichroa febrifuga*
from leaves of the plant *Eucalyptus robusta* (Myrtaceae)
from leaves of the plant *Glycosmis cochinchinensis*
from leaves of the plant *Siparuna andina*
from leaves of the plant *Strychnopsis thouarsii*
from leaves of the plant *Vriesea sanguinolenta*
from leaves of the rainforest tree *Elaeocarpus fuscoides* from New Guinea
from leaves of the rainforest tree *Elaeocarpus grandis* from Queensland
from leaves of the tea plant *Camellia sinensis*
from leaves, bulbs and roots of the plant *Pancratium maritimum*
from *Lentinellus cochleatus*
from *Leontodon hispidus*
from *Leucena glauca*
from lichens

from Liliaceae sp. from Queensland
from Limacia oblonga
from liquorice plants of the Glycyrrhiza sp.
from Lissoclinum patella
from liverwort plant Bazzania novae-zelandiae
from liverwort plant Chiloscypus rivularis
from Lonicera gracilipes
from Lucoagaricus carneifolia
from Lycopodium sp.
from Lyngbya majuscula
from Lyngbya majuscula (Hector's Bay, Jamaica)
from Lyngbya majuscula from Puerto Rica
from Macaranga schweinfurthii
from Mallotus japonicus
from mangosteen tree (Garcinia mangostana L.)
from many types of plants
from marine algae
from marine cyanobacterium
from marine cyanobacterium Nostoc sp.
from marine fungus
from marine invertebrates
from marine organism
from marine organism Salinispora tropica
from marine organisms
from marine species from the west coast of Baja, California
from marine sponges
from marine sponges of the genera Amphimedon, Xestospongia, and Pachypellina
from marine sponges of the genus Agelas
from marine sponges of the genus Phakellia
from marine sponges Xestospongia sp. and Amphimedon sp.
from Marrubium vulgare (Tourn.)
from Mentha piperita
from Meterrhizium anisopliae
from Micromonospora carbonacea
from Micromonospora carbonacea, var. africana
from Micromonospora chersina
from Micromonospora echinospora sp. calichensis
from Micromonospora echinospora subsp. armeniaca and from Dactylosporangium aurantiacum subsp. hamdenensis
from Micromonospora polytrota
from Micromonospora rhodorangea
from Micromonospora sp.
from Micronesian gorgonian(s) from Ant Atoll
from Micronesian gorgonian(s) from Pohnpei
from mollusks
from Monese uniflora
from Monetes engleri (Diptercarpaceae)
from Murrata euchrestitolia
from Murraya euchrestifolia Hayata
from Murraya koenigii
from Murraya koenigii, from Clausena excavata
from Murraya paniculata var. omphalocarpa
from mushrooms
from mutants of Wangiella dermatitidis
from Mycosphaerella lethalis
from myxobacteria
from myxobacteria Sorangium cellulosum
from myxobacterium Chondromyces crocatus
from Narcissus angustifolius (Amaryllidaceae)
from Narcissus angustifolius (Amaryllidaceae), from the plant Nerine bowdenii
from Nauclea latifolia and Nauclea officinalis
from Neisosperma oppositifolia (Apocynaceae), a plant occurring in southern coastal region of Sri Lanka
from Nonomuria rubra
from North Adriatic Sea mussels
from Nostoc sp.
from numerous sources including Laminaria kelp beds, brown, red, and green algae
from Okinawan bivalve Pinna muricata

from *Omphalotus olearius*
from *Onobrychis ebenoides* Boiss & Spruner (Legumin.)
from orange-colored marine sponges, presumed to originate from *Ectyonanchora flabellata*
from *Oscillatoria agardhii*
from *Panax ginseng*
from pea and lentil plants
from *Pedicularis striata*
from *Peganum nigellastrum*
from *Pelargonium sidoides*
from *Penicillium brevicompactum*
from *Penicillium brevicompactum* derived from a sponge *Petrosia ficiformis* (Elba, Italy)
from *Penicillium charlesii*
from *Penicillium citrinum*, isolated from a red alga *Actinotrichia fragilis* (Okinawa, Japan)
from *Penicillium citrium*
from *Penicillium crustosum*
from *Penicillium funiculosum*
from *Penicillium malgiovense*
from *Penicillium multicolor*
from *Penicillium palitans*
from *Penicillium paraherquei*, from *P. cluniae*
from *Penicillium roqueforti*
from *Penicillium sclerotiorum*
from *Penicillium* sp.
from *Penicillium* strain IMI332995
from *Penicillium* strain IMI332996
from *Penicillium* strain IMI332997
from *Penicillium* strain IMI332998
from *Penicillium* strain IMI332999
from *Penicillium* strain IMI333000
from *Penicillium* strain IMI333001
from *Penicillium thiersii*
from *Penicillium thymicola*
from *Penicillium verrucosum*
from *Persea americana* (Lauraceae)
from *Persea obovatifolia*
from *Petchia ceylanica* (Apocynaceae), an evergreen herb indigenous to the lowlands of Sri Lanka
from *Peucedanum guangxiense*
from *Peucedanum japonicum*
from *Phakellia mauritania*
from *Phalaris coerulescens*
from *Phellodendron amurense*
from *Phellodendron amurense* callus
from *Phoma* sp.
from *Physalis alkekengi* L. var.
from *Physostegia virginiana*
from *Piper methysticum*
from plant cell cultures of *Rauwolfia serpentina* [Benth.]
from plant cultures of *Menispermum dauricum*
from plant stigma
from plants
from plants (Amaryllidaceae)
from plants *Lupinus* sp., and from its hemiparasite *Castilleja indivisa*
from plants of the *Alstonia* sp.
from plants of the *Citrus* sp.
from plants of the *Colchicum* sp., and others
from plants of the genera *Aconitum* and *Delphinium*
from plants of the genus *Aconitum* and genus *Delphinium*
from plants of the genus *Mesembryanthemaceae* (Aizoaceae) from South Africa
from plants of the *Isolona* sp.
from plants *Piper* sp.
from *Pleurotus ostreatus*
from *Pluchea arguta*
from *Plumeria rubra*
from *Pogonopus* sp. (Rubiaceae)
from *Polyalthia longifolia* (Annonaceae)
from *Polygonum cuspidatum*

from *Portiera hornemannii*
from *Portiera hornemannii* (from Hawaii and the Philippines), apparently derived from the animal's diet of *Plocamium coccineum*
from potato plants
from *Pseudomonas* sp.
from *Pseudomonas syringae*
from *Pseudomonas syringae* var. *tagetis*
from *Pseudonocardia* sp., CL38489
from *Psychotria* sp. from the Amazon
from *Pterula* sp.
from puffer fish
from pumpkin seeds
from *Rabdosia ternifolia*
from *Ratibida columnifera*
from *Rauwolfia sellowii* [Muell.-Arg.] from Brazil, a plant used in traditional medicine
from *Rehmannia glutinosa*
from resin of *Garcinia hanburyi* (Guttiferae)
from resupinate fruit bodies of the fungus *Hapalopilus mutans*
from *Rhazya stricta* [Decaisne] (Apocynaceae), widely distributed in Pakistan
from *Rhinacanthinus nasutus*
from rhizomes of the water lily *Nuphar pumilum*, used in traditional Chinese and Japanese medicines
from *Rhododendron* sp.

from root and bark of the plant *Triphyophyllum peltatum*, and from other plants including *Ancistrocladus heyneanus*, *Uapaca nitida*
from root bark of *Hibiscus syriacus*
from root bark of *Tabernaemontana australis* (Apocynaceae)
from root bark of *Tabernaemontana hystrix* (Apocynaceae)
from root bark of the African plant *Cryptolepis sanguinolenta*
from root bark of the African plant *Hoslundia opposita*
from root bark of the plant *Ancistrocladus likoko*
from root bark of the Thai plant *Celastrus paniculatus* (Celastraceae), from roots of the plant *Salacia kraussii*
from roots and rhizomes of the Asian plant *Nardostachys chinensis* (Valerianaceae)
from roots and stem of the Amazonian plant *Picrolemma sprucei* (Simaroubaceae)
from roots of *Bupleurum fruticosum*
from roots of *Esenbeckia grandiflora*
from roots of *Lingusticum elatum*
from roots of *Peucedanum ostruthium*
from roots of *Peucedanum praeruptorum*
from roots of *Stellera chamaejasme* (Thymelaceae)
from roots of *Stemona tuberosa*
from roots of the Amazonian plant *Piptomorphe peltata* (Piperaceae)
from roots of the biennial plant *Glaucium oxylobum* from northern Iran
from roots of the central and west African shrub *Cryptolepis sanguinolenta*
from roots of the Mozambique plant *Salacia kraussii*
from roots of the plant *Aconitum barbatum*
from roots of the plant *Aegle marmelos*
from roots of the plant *Alstonia angustifolia*
from roots of the plant *Angelica gigas*
from roots of the plant *Angelica pubescens*
from roots of the plant *Asparagus africanus*
from roots of the plant *Brugmansia* sp.
from roots of the plant *Citrus paradisi*
from roots of the plant *Clausena harmandiana*
from roots of the plant *Cryptolepis sanguinolenta*
from roots of the plant *Cyclea barbata*
from roots of the plant *Delphinium linearilobum*
from roots of the plant *Dichroaefrifuga* sp.
from roots of the plant *Erycoma longifolia*
from roots of the plant *Eurycoma longifolia*
from roots of the plant *Eurycoma longifolia*; from the stem of the plant *Quassia indica*
from roots of the plant *Goniothalamus griffithii*
from roots of the plant *Hydrangea chinensis*
from roots of the plant *Isatis indigotica* (Cruciferae), used in traditional Chinese medicine
from roots of the plant *Isopyrum thalictroides*
from roots of the plant *Nardostachys chinensis*
from roots of the plant *Nepenthes thorelii*
from roots of the plant *Rauwolfia verticillata*

from roots of the plant *Salacia kraussii*, from the plant *Trypterigyum wilfordii*
from roots of the plant *Stemona mairei* from Yunnan Province, China
from roots of the plant *Strychnos icaia*
from roots of the plant *Strychnos icaia*, *Strychnos nux vomica*
from roots of the plant *Thalictrum faberi* (Ranunculaceae)
from roots of the plant *Toddalia asiatica*
from roots of the plant *Zanthoxylum gillettii*
from roots of the plants *Solidago missouriensis* and *Helichrysum chionosphaerum*
from roots of the Tanzanian plant *Strychnos usambarensis*
from roots of the the central and west African shrub *Cryptolepis sanguinolenta*, and from the Burkina Faso shrub *Sida acuta*
from roots of Yalaha
from roots of Yalaha (a cross of *Citrus paradisi* and *Citrus tangerine*)
from roots of *Arundo donax* L.
from roots, leaves and flowers of the plant *Prestonia amabilis* from montane rainforest southern Ecuador
from *Ruta graveolens*
from *Saccharopolyspora erythraea*
from salamander skin
from *Sceletium* sp.
from sclerotia of the parasitic fungus *Claviceps purpurea*
from sclerotoid ascostromata of *Eupenicillium molle*
from seed extract of *Ipomoea obscura*
from seeds of *Ateleia herbert smithii* (Leguminosae)
from seeds of *Ricinus communis*
from seeds of *Tapirira guianensis*
from seeds of the 'Black Pepper' plant, *Piper nigrum*
from seeds of the plant *Erythrina hypaphorus*, also from the herb *Astragalus lusitanicus* from Mediterranean areas
from seeds of the plant *Picalime nitida*
from seeds of the plant *Populus tacamacaha*
from seeds of the plant *Zizyphus vulgaris* (Rhamnaceae), and *Z. jujuba*
from *Selaginella delicatula* (Selaginellaceae)
from *Selaginella moellendorffii* (Selaginellaceae)
from *Senecio* sp. from Bulgaria
from *Seseli sibiricum*
from several ascomycetes including *Cochliobolus miyabeanus*, *Helminthosporium leersii*, *Helminthosporium sativum*
from several fungi sp., including *Fusarium avenaceum*, *F. tricinctum*, *Talaromyces flavus*
from several plant species of the genus *Cimicifuga*
from several species of macroalgae and one microalgae
from several species of macroalgae and one microalgae (*Porphyridium purpureum*)
from several species of plants, including *Psoralea corylifolia*, *Metrodorea flavida*
from several species of seabirds, plankton, fish, seal; bioaccumulates in the Arctic food chain
from several species, including *Penicillium* sp., *Aspergillus* sp., *Byssoschlamys* sp.
from several Symbiodinium strains obtained by different researchers around Japan
from shoots of the plant *Pituranthos triradiatus*
from *Simaba cedron*
from simaroubaceous plants
from skin of dendrobatid frogs
from skin of *Phyllomedusa sauvagei*
from skin of the Central American frog *Oophaga pumilio*

from skin of the Central American frog *Oophaga pumilio*, from skin of the South American frog *Phyllobates aurotaenia* (Dendrobatidae)
from skin of the Ecuadorian frog *Epipedobates tricolor*
from skin of the frog *Mantella* sp. from Madagascar
from skin of the South American frog *Dendrobates histrionicus*
from skin of the South American frog *Dendrobates* sp.
from skin of the South American frog *Dendrobates* sp., from skin of the frog *Mantella* sp. from Madagascar
from skin of the South American frog *Phyllobates aurotaenia*
from skin of the South American frog *Phyllobates aurotaenia* (Dendrobatidae)

from skin of the South American frog *Phyllobates aurotaenia* (Dendrobatidae), from skin of the frog *Mantella* sp. from Madagascar

from skin of the South American frog *Phyllobates aurotaenia* (Dendrobatidae); from skin of the Central American frog *Oophaga pumilio*
from skin of toads
from slimy fruit bodies of the fungus *Cortinarius sinapicolor*
from soap bark tree *Quillaja saponaria*
from soft unspecified corals of the Andaman Islands (Indian Ocean)
from soil of a Douglas fir forest, believed to be formed naturally

from soil surrounding the wood-rotting fungus *Lepista nuda* (common wood blewitt)
from solid fermentation cultures of the basidiomycete *Coprinus xanthothrix*
from *Sophora flavescens* (Leguminosae)
from *Sorangium cellulosum*
from sponge *Dysidea chlorea*
from *Spongosorites* sp. from the south coast of Australia
from spore-derived mycobionts of the lichen *Graphis* sp. growing on tree bark in the Philippines
from spores of the bacterium *Clostridium botulinum*
from *Sporothrix* sp.
from stalk of the plant *Tabernaemontana australis* (Apocynaceae)
from *Staphylococcus aureus*; *Burkholderia cepacia*; marine bacterium *Pseudoalteromonas luteoviolacea*
from *Stellaria yunnanensis*
from stem and bark of the plant *Spathodea campanulata*
from stem and leaves of the plant *Ancistrocladus robertsoniorum*
from stem and leaves of the plant *Andira inermis*
from stem and roots of the plant *Spirospermum penduliflorum* and root of the plant *Cyclea barbata*
from stem bark and root bark of the African plant *Morinda lucida*
from stem bark and root bark of the plant *Alstonia macrophylla*
from stem bark and root bark of the plant *Alstonia macrophylla*, and from the stem bark of *Pleiotheca talbotii* Wernham
from stem bark and root bark of the plant *Morinda lucida*
from stem bark and roots of the plant *Murraya koenigii* (Rutaceae)
from stem bark and seeds of *Aspidosperma ramiflorum*, from Brazil
from stem bark of *Cudrania tricuspidata*
from stem bark of *Hernandia nymphaeifolia*
from stem bark of Panamanian *Stemmadenia obovata* [Benth.]
from stem bark of *Paramignya monophylla*
from stem bark of the Bolivian vine plant *Sparattanthelium amazonum*
from stem bark of the plant *Corynanthe pachyceras*
from stem bark of the plant *Duguetia hadrantha*
from stem bark of the plant *Isolona guesquiereina*
from stem bark of the plant *Strychnos myrtoides*
from stem bark of the tree *Duguetia vallicola* (Annonaceae) from Colombia
from stem bark of *Wikstroemia retusa*, found in the Ryukyu Islands
from stem bark of *Zanthoxylum myricanthum*
from stem extracts of *Kopsia pauciflora* [Hook f.], from Sabah (North Borneo)
from stem of the plant *Artemisia indica*
from stem of the plant *Brucea javanica*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, and the Kenyan plant *Toddalia asiatica* (Rutaceae)
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, also from *Haplophyllum* sp.
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, and leaves of the Amazonian tree *Virola surinamensis* (Myristaceae)
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, and others
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from a variety of plants of the *Haplophyllum* sp.
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from a variety of plants of the *Haplophyllum* sp., from stems of the plant *Metrodorea flavida*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from aerial parts of the plant *Bocconia arborea* (Papaveraceae), from roots of the biennial plant *Glaucium oxylobum* from northern Iran
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from *Dictamnus dasycarpus*, from a variety of plants of the *Haplophyllum* sp.
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from *Phellodendron amurense* callus
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from *Phellodendron amurense*, from stems of the plant *Metrodorea flavida*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from roots of *Stauranthus perforatus*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from stems of the plant *Metrodorea flavida*
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from the annual herb *Fumaria* sp. from Algeria
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, from the plant *Almeidia rubra*, the plant *Hortia columbana*, the plant *Phellodendron amurense*, from a variety of plants of the *Haplophyllum* sp.
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifoliolum*, *Zanthoxylum avicennae* (Rutaceae)

from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifolium*; constituent of nutmeg
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifolium*; faecal sterol
from stem wood and leaves of *Hibiscus tiliaceus* and stem wood from *Zanthoxylum integrifolium*; from tuber of the plant *Cyperus rotundus*
from stem wood and leaves of *Hibiscus tiliaceus*, from stem wood of *Zanthoxylum integrifolium*, from the bark of *Zanthoxylum usambarense* (Rutaceae)
from stem wood and leaves of *Hibiscus tiliaceus*, stem wood of *Zanthoxylum integrifolium*, and bark of the Indonesian plant *Fagara rhetza*
from stem wood and leaves of *Hibiscus tiliaceus*, stem wood of *Zanthoxylum integrifolium*, and root bark of the Tanzanian plant *Zanthoxylum gillettii*
from stem-bark of the Malayan tree *Kopsia arborea*
from *Stemona tuberosa*
from stems of *Derris scandens*
from stems of *Nothapodytes foetida*, from Taiwan
from stems of the plant *Metrodorea flavida*
from *Stephania dinklagei* (Menispermaceae)
from *Stephania dinklagei* (Menispermaceae), from bark of the Brazilian trees *Xylopia amazonica* and *X. aromatica*
from *Stephania tetrandra*
from *Streptomyces acrimycini*, isolated from sediment (Sao Sebastiao channel, Brazil)
from *Streptomyces albus* NRRL B-1865
from *Streptomyces antibioticus*
from *Streptomyces armeniacus*
from *Streptomyces cattleya*
from *Streptomyces chartreusis*
from *Streptomyces chrestomyceticus*
from *Streptomyces chromofuscus*
from *Streptomyces chrysomallus*
from *Streptomyces cyaneogriseus* sp. noncyanogenus
from *Streptomyces globisporus*
from *Streptomyces griseochromogenes*
from *Streptomyces griseoflavus* Goe 3592
from *Streptomyces griseus*
from *Streptomyces griseus*, from *Actinomyces levoris*
from *Streptomyces hygrosopicus*
from *Streptomyces hygrosopicus* var. *azalomyceticus*
from *Streptomyces lavendulae*
from *Streptomyces luteoreticuli*
from *Streptomyces narbonensis*
from *Streptomyces netropsis*
from *Streptomyces nitrosporeus*
from *Streptomyces nitrosporeus* 30643
from *Streptomyces noursei*
from *Streptomyces pactum*
from *Streptomyces paulus*
from *Streptomyces platensis*
from *Streptomyces pulveraceus* subsp. *fostreus*
from *Streptomyces* sp.
from *Streptomyces* sp.
from *Streptomyces* sp. WK-3419
from *Streptomyces staurosporeus*
from *Streptomyces* strains FORM5 and A1
from *Streptomyces toyocaensis*
from *Streptomyces venezuelae*
from *Streptomyces violaceoruber*
from *Streptomyces violaceus* 2448-SVT2
from *Streptomyces zelensis*
from *Streptoverticillium ehimensis*, from citrus plants
from *Strophanthus gratus* (plant), from the plant *Nerium oleander* (Apocynaceae)
from *Strychnos myrtoides*
from *Strychnos* sp.
from *Strychnos usambarensis*
from sugarcane and other plants
from *Symphytum aintabicum* (Hub. - Mor. & Wickens) from Turkey
from *Symphytum sylvaticum* (Boiss.) subsp. *sepulcrale* (Boiss. & Bal.) from Turkey
from *Talaromyces luteus*
from *Talaromyces wortmannii* KY 12420

from Tasmanian red alga *Plocamium costatum*
from Tasmanian red alga *Plocamium costatum*; P-deters settlement of the barnacle *Balanus amphitrite*
from *Tephrosia abbotiae*
from terrestrial blue-green alga *Hapalosiphon delicatulus*
from terrestrial plant *Stevia sanguinea*
from *Tetrapleura tetraptera* (Schumach. and Thonn) Taub. (Mimosaceae), commonly known as Aridan (fruit), from a variety of plants of the *Haplophyllum* sp.
from *Teucrium racemosum*
from the Chinese herb huanglian, *Coptis chinensis*
from the Okinawan sponge *Acanthella* sp.; also found in the sponge *Phakellia pulcherrima*
from the (Western Caroline Islands) Belau sponge *Stylotella aurantium* (formerly *S. agminata*)
from the 'Indian Paint Fungus' *Echinodontium tinctorium*, and from *Pyromyces albomarginatus*
from the acorn worm *Notomastus lobatus*
from the actinomycete *Micromonospora* sp., obtained from *Didemnum proliferum* (Shishijima Is., Japan)
from the Actinomycete *Nocardia brasiliensis*
from the actinomycete *Verrucospora* sp. (deep sediment, Sea of Japan)
from the Aegean Sea sponge *Verongia aerophoba*
from the aerial parts of the plant *Schizanthus grahamii*
from the aerial parts of *Boucharatia neurococca* (Rutaceae)
from the aerial parts of *Clematis chinensis*
from the African mollusk *Chromodoris hamiltoni*
from the African plant *Maytenus serrata* (Celastraceae), formerly named *Maytenus ovatus*
from the African tree *Kigelia pinnata* (Bignoniaceae)
from the alga *Caulerpa serrulata* from the Xisha Islands, South China Sea
from the alga *Gloiosiphonia verticillaris*
from the alga *Laurencia obtusa*
from the alga *Laurencia scoparia*, from the coast of Brazil
from the alga *Odonthalia corymbifera*
from the American plant Witch Hazel, *Hamamelis virginiana*, and from North African grapevines
from the amphibian *Bufo bufo gargarizans* (Bufonidae)
from the amphibian *Bufo bufo gargarizans*
from the annual herb *Fumaria* sp. from Algeria
from the ant *Myrmecaria* sp.
from the Antarctic nudibranch *Austrodoris kerguelensis*
from the Antarctic red alga *Delisea fimbriata*
from the Antarctic red alga *Pantoneura plocamiodes*
from the Antarctic red alga *Plocamium cartilagineum*
from the Antarctic sponge *Dendrilla membranosa*
from the Antarctic sponge *Dendrilla membranosa* and the Pacific nudibranch *Cadlina luteomarginata*
from the Antarctic sponge *Psammopemma* sp.
from the ant-cultivated fungus *Lepiota* sp.
from the aquatic fungus *Pseudohalonectria adversaria* YMF 1.01019
from the Argentinian plant *Ipomoea fistulosa* (Convolvulaceae)
from the Arizona soil fungus *Auxarthron conjugatum*
from the ascidian *Aplidium* sp.
from the ascidian *Atrium robustum* (Australia)
from the ascidian *Botrylloides tyreum* (Palau)
from the ascidian *Botryllus* sp. (Philippines) and *B. schlosseri* (Great Barrier Reef)
from the ascidian *Clavelina picta*
from the ascidian *Cystodytes* cf. *violatinctus* (Kenya)
from the ascidian *Cystodytes dellechiaiei*
from the ascidian *Didemnum molle*
from the ascidian *Didemnum obscurum* (Indian Ocean)
from the ascidian *Didemnum* sp. (Chuuk Atoll, Micronesia)
from the ascidian *Didemnum voeltzkowi*
from the ascidian *Ecteinascidia turbinata*
from the ascidian *Eudistoma gilboverde*
from the ascidian *Eudistoma* sp.
from the ascidian *Leptoclinides dubuis*
from the ascidian *Lissoclinum bistratum*
from the ascidian *Lissoclinum* cf. *badium* (Indonesia)
from the ascidian *Lissoclinum* sp.
from the ascidian *Phallusia mammillata*
from the ascidian *Pseudodistoma arborescens* (New Caledonia)
from the ascidian *Pseudodistoma cereum* (New Zealand)
from the ascidian *Pycnoclavella kottae* from New Zealand

from the ascidian *Synoicum blochmanni*
from the ascomycete *Clonostachys cylindrospora*
from the ascomycete *Cochliobolus heterostrophus*
from the ascomycete *Lachnum papyraceum*
from the ascomycete *Neobulgaria pura*
from the ascostromata of *Petromyces muricatus*
from the Asian plant *A. asphodeloides*
from the Asian plant *Allium sativum*
from the Asian plant *Boussingaultia baselloides*
from the Asian plant *C. sappan*
from the Asian plant *Eriobotrya japonica*
from the Asian plant *Gymnema sylvestre*
from the Asian plant *Stevia rebaudiana*
from the Asian tree *Anthocephalus chinensis*
from the Atlantic bryozoan *Amathia alternata*
from the Atlantic bryozoan *Amathia convoluta*
from the Australian ascidian *Pseudodistoma aureum*
from the Australian ascidian *Synoicum prunum*
from the Australian *Axinella* sp.
from the Australian deep water sponge *Spongosorites* sp.
from the Australian *Laurencia filiformis*
from the Australian marine sponge *Dysidea dendyi*
from the Australian marine sponge *Ianthella* sp.
from the Australian marine sponge *Zyzya fuliginosa*
from the Australian sponge *Oceanapia* sp.
from the Australian sponge *Ulosa spongia*
from the Australian sponges *Phoriospongia* sp. and *Callyspongia bilamellata*
from the bacterial strain *Rhodococcus* sp. Mer-N1033
from the bacterium *Myxobacteria fulvus* (Myxococcaceae)
from the bacterium *Streptomyces calvus*
from the Bahamian gorgonian *Briareum asbestinum*
from the Bahamian marine fungus *Fusarium* sp. (*F. herterosporum* ?)
from the Bahamian sponge *Agelas dispar*
from the bark of the plant *Sarcomelicope megistophylla*
from the bark of *Aegle marmelos*
from the bark of *Aglaia argentea*
from the bark of *Glycosmis rupestris*
from the bark of *Goniothalamus marcanii* (Annonaceae)
from the bark of *Guettarda noumeana* (Rubiaceae) from New Caledonia
from the bark of *Spidosperma vargasii* (Apocynaceae)
from the bark of the roots of *Schlerochiton ilicifolius*
from the bark of the tree *Cinchona* sp. (Rubiaceae)
from the bark of *Wikstroemia retusa*, found in the Ryukyu Islands
from the bark of *Zanthoxylum schinifolium*
from the basidiomycete *Irpex lacteus*
from the basidiomycete *Pleurotus pulmonarius*
from the basidiomycete *Polyporus sulphureus*, from several deuteromycetes including *Beauveria bassiana*, *Paecilomyces fumosoroseus*, *Fusarium* spp., and *Beauveria* sp. FKI-1366
from the bean family plant *Cyamopsis tetragonoloba*
from the Bhutanese medicinal plant *Aconitum orochryseum*
from the birch tree, *Betula alba* (Betulaceae) and related species
from the 'Black Pepper' plant, *Piper nigrum*
from the blister beetle *Paederus fuscipes*
from the blue-green alga *Dichotrix baueriana*
from the blue-green alga *Hapalosiphon laingii*
from the blue-green alga *Lyngbya bouillonii*
from the blue-green alga *Lyngbya majascula*
from the blue-green alga *Lyngbya majascula*, from Curacao
from the blue-green alga *Lyngbya majascula*, growing with a *Microcoleus* sp. on the hard coral *Porites cylindrica*
from the blue-green alga *Nostoc* sp.
from the blue-green alga *Nostoc sphaericum* (strain EX-5-1)
from the blue-green alga *Oscillatoria agardhii*
from the Bolivian shrub *Saracha punctata* (Solanaceae)
from the Brazilian ascidian *Didemnum granulatum*
from the Brazilian *Deppea blumenaviensis* [Schumann], (Rubiaceae)
from the Brazilian marine sponge *Aplysina caissara*

from the Brazilian organisms *Senecio selloi*
 from the Brazilian plant *Holostylis reniformis*
 from the Brazilian plant *Paullinia cupana*
 from the Brazilian plant *Vellozia bicolor*
 from the Brazilian plants *Eupatorium rufescens*, and *Senecio selloi*
 from the brown alga a *Cytoseira* species (Canary Islands)
 from the brown alga *Bifurcaria bifurcata* (Atlantic coast of Morocco)
 from the brown alga *Carpophyllum angustifolium*
 from the brown alga *Cystophora retroflexa*
 from the brown alga *Dictyopteris divaricata* (Qingdao coast, China)
 from the brown alga *Dictyopteris divaricata* (Shandong coast, China)
 from the brown alga *Dictyota dichotoma* (Aegean Sea)
 from the brown alga *Dictyota dichotoma* (Karachi coast in the Arabian Sea)
 from the brown alga *Dictyota linearis* (Chios Is., Greece)
 from the brown alga *Dictyota paffii* (Northeast Brazil)
 from the brown alga *Eisenia bicyclis*, a very common Pacific-coast Japanese species
 from the brown alga *Ishige okamurae* (Boso Peninsula, Japan)
 from the brown alga *Leathesia nana* (Shandong Province, China)
 from the brown alga *Sargassum parvivesiculosum* (Hainan Province, China)
 from the brown alga *Scytosiphon lomentaria*
 from the brown alga *Spatoglossum variabile*, found along the Pakistan coast
 from the brown algae *Sargassum spinuligerum* and *Cystophora torulosa*
 from the bryozoan *Amathia convoluta*
 from the bryozoan *Amathia convoluta* from Florida, and from Tasmania
 from the bryozoan *Bugula dentata*
 from the bryozoan *Bugula neritina*
 from the bryozoan *Euthyroides episcopalis*
 from the bryozoan *Flustra folicea* from the North Sea
 from the bryozoan *Hincksinoflustra denticulate*
 from the bryozoan *Securiflustra securifrons*
 from the bulbs of *Crinum yemense*
 from the bulbs of *Hymenocallis festalis* (amaryllidaceae)
 from the burrowing asp (also known as mole viper) [snake] *Atractaspis* sp. (Serpentes, Atractaspididae)
 from the bushy shrub *Solanum pseudocapsicum* (Solanaceae) from high-altitude areas in India
 from the Californian bryozoan *Zoobotryon pellucidum*
 from the Californian sponge *Aplysilla*
 from the Californian sponge *Aplysilla polyrhaphis*
 from the Canary Islands red alga *Laurencia pinnatifida*
 from the Canary Islands red alga *Laurencia viridis*
 from the Canary Islands sea hare *Aplysia dactylomela*
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 from the cardamon spice plant *Amomum* sp. (Zingiberaceae)
 from the Caribbean deep water sponge *Batzella* sp.
 from the Caribbean gorgonian coral *Pseudopterogorgia americana*
 from the Caribbean gorgonian octocoral *Erythropodium caribaeorum*
 from the Caribbean gorgonian octocoral *Eunicea* sp.
 from the Caribbean horncoral *Pseudopterogorgia kallos*
 from the Caribbean marine cyanobacterium *Lyngbya majascula*
 from the Caribbean octocoral *Erythropodium caribaeorum*
 from the Caribbean sea plume *P. elisabethae*
 from the Caribbean sea-squirt *Ecteinascidia turbinata*
 from the Caribbean sea-squirt *Tridemnum solidum*
 from the Caribbean sponge *Agelas* sp.
 from the Caribbean sponge *Aplysina archeri*
 from the Caribbean sponge *Aplysina cauliformis*
 from the Caribbean sponge *Aplysina insularis*
 from the Caribbean sponge *Plakortis simplex*
 from the Caribbean sponge *Pseudoceratina crassa*
 from the Caribbean sponge *Pseudoceratina crassa*, and the sponge *Psammoplysilla purpurea*
 from the Caribbean sponge *Pseudoceratina* sp.
 from the Caribbean sponge *Verongula gigantea*
 from the Caribbean sponges *Ageals clathrodes*, *A. conifera*, *A. dispar*, *A. longissima*
 from the Caribbean sea hare *Aplysia dactylomela*, probably originating in the seaweed *Laurencia poitei*
 from the carrot truffle *Stephanospora caroticolor*
 from the cellular slime mold *Dictyostelium purpureum*
 from the Central American and Caribbean plant *Neurolaena lobata*

from the Central and South American tree *Annona purpurea*
from the Central Asian lichen *Acarospora gobiensis*
from the Chilean red alga *Plocamium cartilagineum*
from the Chinaberry tree *Melia toosendan*
from the Chinese herb huanglian, *Coptis chinensis*
from the Chinese herb *Tripterygium wilfordii*
from the Chinese herbal plant *Centipeda minima* (Compositae)
from the Chinese herbal plant *Tacca plantaginea* (Taccaceae)
from the Chinese medicinal plant *Agrimonia pilosa* Ledeb.
from the Chinese plant *Amoora yunnanensis* from Yunnan Province
from the Chinese plant *Hypericum japonicum*
from the Chinese plant *Pulsatille chinensis*
from the Chinese plant *Schisandra sphenanthera*
from the Chinese plant *Tylophora atrofolliculata*
from the Chinese puffer fish
from the Chinese tree, *Camptotheca acuminata*
from the citrus hybrid 'Yalaha', *C. paradisi* x *C. tanferina*
from the club moss *Huperzia serrata*
from the club moss *Lycopodium annotinum* and *L. annotinum* var. *acrifolium*
from the club moss *Lycopodium chinense*
from the club moss *Lycopodium serratum*
from the club moss *Lycopodium* sp.
from the Colombian frog *Dendrobates histrionicus*
from the Colombian medicinal plant *Niphogeton ternata*
from the colonial ascidian *Diazona angulata*
from the colourless fruit body of the North American gasteromycete (puff-ball) *Calvatia rubro-flava*, which turns golden yellow when touched
from the common European toadstool *Lactarius blennius*
from the coral *Sinularia* sp.
from the corn (maize) plant, *Zea mays*
from the corn plant *Zea mays*
from the Costa Rican frog, *Atelopus chiriquiensis*
from the cube root *Derris malaccensis*
from the culture broth of *Aspergillus niger* FT-0554
from the culture broth of *Aspergillus niger* FT-0555
from the culture broth of *Aspergillus* sp.
from the culture broth of *Coronophora gregaria* L2495
from the culture broth of *Fusarium* sp.
from the culture broth of *Nectria haematococca*
from the culture broth of *Paecilomyces* sp. BAUA3058
from the culture broth of the basidiomycete *Mycena* sp. TA 87202
from the culture broth of the fungus *Aspergillus tamarii*
from the culture broth of the fungus *Stereum* sp. YMF1.1587
from the culture filtrate of *Penicillium bilaiae*
from the culture filtrate of the fungus *Penicillium bilaiae*
from the culture of *Penicillium citrinum*
from the cultured mycelia of *Armillariella mellea*
from the Curacao blue-green alga *Lyngbya majascula*
from the cyanobacterium *Lyngbya gracilis*
from the cyanobacterium *Lyngbya majascula*
from the cyanobacterium *Lyngbya majascula* from Kahala Beach, Oahu, Hawaii
from the cyanobacterium *Microcoleus lyngbyaceus*
from the cyanobacterium *Microcystis aeruginosa*
from the cyanobacterium *Microcystis aeruginosa*
from the cyanobacterium *Microcystis aeruginosa*
from the cyanobacterium *Nodularia spumigena*
from the cyanobacterium *Lyngbya majascula* from both Jamaica and Panama
from the dark-blue marine *Cribochalina* sp. sponge
from the deep sea bacterium *Marinispora* sp.
from the deep sea sponge *Neopeltidae* sp.
from the deep-water marine sponge *Hamacantha* sp.
from the degradation of humic acids in soil
from the dinoflagellate *Alexandrium ostenfeldii*
from the dinoflagellate *Gambierdiscus toxicus*
from the dorid nudibranch *Cadlina luteomarginata*
from the dorid nudibranch *Cadlina luteomarginata* and sponges *Aplysilla* sp.

from the dorid nudibranch *Cadlina luteomarginata* and the sponge *Aplysilla glacialis*
from the dorid nudibranch *Chromodoris macfarlandis*
from the dorid nudibranch *Chromodoris norrisi*
from the dried roots of *Neonauclea sessilifolia*
from the dried roots of *Neonauclea sessilifolia*, from the aerial parts of *Psychotria bahiensis* from Trinidad, West Indies
from the duck-lettuce plant *Ottelia alismoides*, found in the Nile River delta region
from the Easter Island red alga *Laurencia claviformis*, also from *Laurencia obtusa*
from the Eastern Pacific octocoral *Carijoa multiflora*
from the edible Adriatic Sea mussel *Mytilus galloprovincialis*
from the edible fruit of the Thai plant *Artocarpus integer* (Moraceae)
from the edible Hawaiian red seaweed *Asparagopsis taxiformis*
from the edible lily *Lilium maximowiczii*, produced in response to attack by the pathogenic fungus *Fusarium oxysporum*
from the edible milk cap [mushroom] *Lactarius* sp.
from the Egyptian plant *Pancreatium sickenbergeri*
from the Egyptian plant *Pancreatium sickenbergeri*, from the bulbs of *Crinum yemense*
from the encrusting bacterium *Kyrtuthrix maculans*
from the encrusting sponge *Aplysilla tango*
from the endophytic fungus *Fusarium subglutinans*
from the endophytic fungus *Pestalotiopsis jesteri*, found in Papua New Guinea rain forests
from the endophytic fungus *Pestalotiopsis microspora*, commonly found in rain forests
from the endophytic fungus *Pestalotiopsis microspora*, commonly found in rain forests, associated with the tree *Torreya taxifolia*
from the epigeal part of *Arundo donax*
from the ergot (fungus on grains and grasses) *Claviceps* sp.
from the evergreen shrub *Sarcococca hookeriana* from Nepal
from the extracts of *Dermocybe sanguinea* and other fungi
from the Far Eastern ascidian *Eudistoma* sp.
from the feather starfish *Comanthus japonica* (Japan)
from the fermentation broth of a *Streptomyces* sp.
from the fermentation broth of *Penicillium aureovirens* VKM FW-766
from the fermentation broth of *Penicillium simplicissimum*
from the fermentation broth of the marine-derived Actinomycete *Nocardioopsis lucentensis* (strain CNR-712)
from the fern *Pteridium aquilinum*
from the figwort (*Scrophularia ningpoensis*)
from the Fijian ascidian *Didemnum* sp.

from the flesh of the mushroom *Cortinarius orellanus*, also from fruit bodies of *Cortinarius rubellus* (also known as *C. speciosissimus*)
from the Floridian bryozoan *Amathia convoluta*
from the flower lupin, *Lupinus angustifolius*, from a variety of plants of the *Haplophyllum* sp.
from the forest microbe *Coiothyrium* sp. from West Borneo
from the forest microbe *Coiothyrium* sp., West Borneo
from the Formosan gorgonian *Briareum excavatum*
from the fresh aerial parts of *Taraxacum formosanum*
from the fresh water cyanobacterium *Oscillatoria agardhii*
from the fresh water lake lichen *Acorospora gobiensis*
from the freshwater blue-green alga *Microcystis aeruginosa*
from the freshwater cyanobacterium (blue-green alga) *Anabaena flos-aquae*
from the freshwater fungus *Paraniesslia* sp.
from the frog *Bufo gargarizans* (Bufonidae)
from the frog *Bufo marinus* (Bufonidae)
from the fruit bodies of *Cortinarius fulvoincartus*, *C. sodagnitus*, and some related toadstools
from the fruit bodies of the fungus *Mycena crocata*
from the fruit bodies of the mushroom *Inonotus xeranticus*
from the fruit bodies of the ubiquitous *Cortinarius violaceus*
from the fruiting bodies of *Leucopaxillus albissimus*
from the fruits of Thai cardamom plant *Amomum krevanh*
from the fungal species *Emericellopsis poonensis*, *E. synnematicola* and *Cephalosporium pimprina*
from the fungi *Monascus rubber* and *Aspergillus terreus*
from the fungi *Phoma* sp. and *Penicillium* sp.
from the fungus *Acanthostigmella* sp.
from the fungus *Alternaria brassicicola*
from the fungus *Armillaria mellea*, also found in cultures of *A. ostoyae*, *A. tabescens*, *A. monadelphae*, *A. gallica*, *A. cepestipes*
from the fungus *Armillaria novae-zelandiae*
from the fungus *Aspergillus arenarius* (Trochocomaceae)
from the fungus *Aspergillus glaucus*, from the extracts of *Dermocybe sanguinea*, and other fungi
from the fungus *Aspergillus nidulans*

from the fungus *Aspergillus* sp.
from the fungus *Aspergillus* sp. associated with the sponge *Jaspis* cf. *coriacea*
from the fungus *Chaetomium globosum*
from the fungus *Chloridium* sp.
from the fungus *Chlorociboria* sp.
from the fungus *Coprinus comatus*
from the fungus *Coprinus xanthothrix*
from the fungus *Cortinarius scaurus*, abundant in moist bogs and conifer forests in the European Alps
from the fungus *Cortinarius* sp. WAT 20880
from the fungus *Cortinarius* sp. WAT 20881
from the fungus *Daldinia concentrica*, from Tokushima, Japan
from the fungus *Dermocybe* sp.
from the fungus *Dermocybe* sp. WAT 24274
from the fungus *Dermocybe* sp. WAT 24275
from the fungus *Dermocybe splendida*
from the fungus *Drechslera avenae*
from the fungus *Drechslera avenae*, from *Alternaria alternata*
from the fungus *Eurotium rubrum*
from the fungus *Eurotium rubrum*, from Australian and New Zealand *Dermocybe* sp.
from the fungus *Fusarium* sp.
from the fungus *Gymnasella dankaliensis*, which is associated with the sponge *Halichondria japonica*
from the fungus *Hericiium erinaceum*
from the fungus *Hericiium erinaceum*
from the fungus *Hetarrhizium anisopliae*
from the fungus M-3 isolated from the marine alga *Porphyra yezoensis*
from the fungus *Mollisia ventosa*
from the fungus *Monascus anka*
from the fungus *Mycena* sp.
from the fungus *Mycena* sp.; component of cellulose bleaching effluent
from the fungus OS-F68576
from the fungus *Penicillium multicolor*
from the fungus *Penicillium thymicola*
from the fungus *Periconia byssoides* associated with the sea hare *Aplysia kurodai*
from the fungus *Periconia circinata* (organism causing milo disease of grain)
from the fungus *Periconia macrospinosa*
from the fungus *Pestalotiopsis* sp.
from the fungus *Plectophomella* sp.
from the fungus *Pseudoarachniotus roseus*
from the fungus *Resinicium pinicola*
from the fungus *Sarcodon leucopus*
from the fungus *Sphaeropsidales* sp.
from the fungus *Stereum* sp. 8954
from the fungus *Suillus granulatus*
from the fungus *Talaromyces helicus*
from the fungus *Trichoderma harzianum*, found on the sponge *Halichondria okadai*
from the fungus *Verticillium balanoides*
from the fungus *Verticillium chlamydosporium*
from the fungus *Xylaria* sp.
from the gallbladder of bears
from the genetically modified microorganism *Streptomyces tendae* Tu901
from the Georgian plant *Galanthus caucasicus*
from the Ghanese plant *Phyllanthus fraternus*
from the Gila monster lizard (*Heloderma* sp.)
from the gorgonian [coral] *Briareum asbestinum*
from the gorgonian *Briareum excavatum*
from the gorgonian *Briareum polyanthes*
from the gorgonian *Gorgonella umbraculum*
from the Grand Baham Island (Caribbean) deep water sponge *Aplysina fistularis fulva*
from the Graviola (Brazilian pawpaw) plant, *Annona muricata*
from the Graviola (Brazilian pawpaw) plant, *Annona muricata*, and related species
from the Great Barrier Reef sponge *Dysidea herbacea*
from the Great Barrier Reef sponge *Dysidea herbacea* and other *Dysidea* sp.
from the Great Barrier Reef sponge *Ianthella quadrangulata*
from the Great Barrier Reef sponges *Spongia* sp.
from the green alga *Caulerpa taxifolia*
from the green alga *Cymopolia barbata*

from the green alga *Panicillus capitatus* (Cat Cay, Bahamas)
from the green upper stem of the fungi *Dermocybe* sp. WAT 26640 and *D. sp.* WAT 24274
from the green upper stem of the fungi *Dermocybe* sp. WAT 26640 and *D. sp.* WAT 24275
from the Guamanian strain of the cyanobacterium *Lyngbya majascula*
from the Guamanian strain of the cyanobacterium *Lyngbya majascula*, also found in L.M. near Florida
from the hallucinogenic Mexican sage plant *Salvia divinorum*
from the Hawaiian red alga *Gracilaria coronopifolia*
from the Hawaiian red alga *Laurencia cartilaginea*
from the Hawaiian sponge *Hyrtilis* sp.
from the hemocytes of the marine tunicate *Styela plicata*
from the herb *Astragalus lusitanicus* from Mediterranean areas
from the herb black cohosh (*Actaea racemosa*; formerly *Cimicifuga racemosa*)
from the herb *Corydalis koidzumiana*
from the Himalayan plant *Cremanthodium discoideum*
from the horn coral *Pseudopterogorgia kallos*, highly cytotoxic, EC50 ~ 10 nanoM, also against malaria-causing organism *Plasmodium falciparum*
from the hybrid soft coral *Sinularia maxima* × *Sinularia polydactyla*
from the Indian marine sponge *Psammaphysilla purpurea*
from the Indian *Nothapodytes foetida*
from the Indian Ocean ascidian *Stolonia* sp.
from the Indian Ocean gorgonian [coral] *Junceela juncea*
from the Indian Ocean gorgonian *Gorgonella umbraculum*
from the Indian Ocean nudibranch *Chromodoris cavae*
from the Indian Ocean red alga *Chondria armata*
from the Indian Ocean sponge *Iotrochota purpurea*
from the Indian Ocean sponge *Phakellia mauritiana*
from the Indian Ocean sponge *Xestospongia* sp.
from the Indian Ocean sponge *Xestospongia* sp., also the sponge *Agelas* sp.
from the Indian plant *Enhydra fluctuans*
from the Indonesian ascidian *Botryllus* sp.
from the Indonesian gorgonian *Junceela fragilis*
from the Indonesian marine sponge *Biemna fortis*
from the Indonesian plant *Aegle marmelos*
from the Indonesian red alga *Vidalia* sp.
from the Indonesian sponge *Acanthostrongylophora* sp. (Haplosclerida: Petrosiidae)
from the Indonesian sponge *Agelas nakamurai*
from the Indopacific marine coelenterate *Carijoa* sp.
from the Indopacific sponge *Aplysina* sp.
from the Indopacific sponge *Stylissa carteri*
from the Indopacific sponge *Zyssa fuliginosa*
from the inedible fungus *Ascoclavulia sakaii* from Japan
from the insect *Coccus cacti* L
from the insect pathogenic fungus *Cordiceps unilateralis*
from the intertidal shelled mollusc *Siphonaria capensis* from South Africa
from the intertidal shelled mollusc *Siphonaria serrata* from South Africa
from the Ionean Sea, Greece, *Laurencia obtusa*
from the Irish red alga *Laurencia obtusa*
from the Irish red alga *Laurencia paniculata*
from the Jamaican sponge *Smenospongia aurea*
from the Japanese beach sand marine fungus FOM-8108
from the Japanese gastropod *Turbo marmorata*
from the Japanese marine sponge *Dictyodendrilla verongiformis*
from the Japanese plant *Eupatorium glehni*
from the Japanese red seaweed *Laurencia* sp.
from the Japanese sea hare *Aplysia parvula*
from the Japanese sea hare *Dolabella auricularia*
from the Japanese sponge *Neopetrosia* sp.
from the Japanese toadstool *Boletus laetissimus*, and from *Boletus rufoaureus* from Malaysia and New Zealand
from the ladybird [beetle] *Hippodamia convergens*
from the larvae of the marine bryozoan *Bugula neritina* (Morehead, North Carolina), but produced by the bacterial symbiont *Endobugula sertula*
from the latex of *Calophyllum teysmanii*
from the leaves and stem of *Piper peepuloides*
from the leaves of the plant *Erythroxylum moonii*
from the leaves of *Hodgkinsonia frutescens*
from the leaves of *Kopsia tenuis* [Leenh. et Steenis], from Sarawak

from the leaves of *Nitraria tangutorum*
from the leaves of *Quercus coccifera*
from the leaves of the Malaysian tree *Phoebe grandis*
from the leaves of the plant *Sarcococca coriacea*
from the lichen *Catarraphia dictyoplaca*
from the lichen *Dimelaena cf. radiata*
from the lichen *Lachnum papyraceum*
from the lichen *Lecanora jamesii*
from the lichen *Lecanora lividocinera*
from the lichen *Nephroma laevigatum*
from the lichens *Byssoloma sp.* and *Sporopodium sp.*
from the lichens growing around the high salt-content lake Issyk-Kul in Central Asia
from the licorice plant, *Glycyrrhiza glabra*
from the liquid culture of *Penicillium cf. simplicissimum*
from the lithistid marine sponge *Theonella sp.*
from the lithistid marine sponge *Theonella sp.*, also from the related sponge *Microscleroderma sp.*
from the liverwort plant *Bazzania trilobata*
from the liverwort plant *Lepidolaena taylorii*
from the liverwort plants *Herbertus sakuraii* and *Mastigophora diclados*
from the 'magic mushroom'
from the Malaysian red alga *Laurencia pannosa*
from the Malaysian red alga *Laurencia sp.*
from the male moth *Cosmosoma myrodora*
from the Maltese Islands and Corsica red alga *Plocamium cartilageum*
from the mangrove [tree] *Bruguiera gymnorrhiza* (Guangxi Province, China)
from the mangrove plant *Excoecaria agallocha* Linn.
from the marine actinomycete *Verrucospora sp.*
from the marine algicolous fungus *Aspergillus terreus*
from the marine Antarctic octocoral *Dasystenella acanthina*
from the marine ascidian *Didemnum sp.*
from the marine ascidian *Polycitor africanus*
from the marine bacterium *Bacillus sp. SY-1*
from the marine bacterium *Pseudoalteromonas phenolica sp. nov.*
from the marine blue-green alga *Lyngbya majascula*
from the marine blue-green alga *Nostoc linckia*
from the marine brown alga *Sargassum macrocarpum*
from the marine bryozoan *Amathia convoluta*
from the marine bryozoan *Amathia wilsoni*
from the marine bryozoan *Bugula neritina*
from the marine bryozoan *Bugula neritina* (Bugulidae)
from the marine bryozoan *Calibugula intermis* (Palau)
from the marine bryozoan *Flustra foliacea* ("Steingrund", North Sea)
from the marine bryozoan *Myriapora truncata*
from the marine bryozoan *Flustra foliacea*
from the marine ciliate *Euplotes crassus* on pathogenic protozoa *Leishmania major* and *Leishmania infantum*
from the marine coelenterate *Briareum excavatum* (Taiwan)
from the marine coelenterate *Carijoa multiflora* (Panama)
from the marine coelenterate *Cladiella* species (Andaman Is., India)
from the marine coelenterate *Clavularia koellikeri* (Okinawa)
from the marine coelenterate *Clavularia viridis* (Okinawa)
from the marine coelenterate *Clavularia viridis* (Taiwan)
from the marine coelenterate *Dendronephthya gigantea* (Green Is., Taiwan)
from the marine coelenterate *Eleutherobia sp.* (Pohnpei, Micronesia).
from the marine coelenterate *Eunicea laciniata* (Barbados)
from the marine coelenterate *Eunicea sp.* (Colombian Caribbean)
from the marine coelenterate from *Sarcophyton glaucum* (Taiwan)
from the marine coelenterate hybrid soft coral *Sinularia maxima* x *S. polydactyla* (Guam)
from the marine coelenterate *Isis hippuris* (coast of Taiwan)
from the marine coelenterate *Isis hippuris* (Taiwan)
from the marine coelenterate *Junceella fragilis* (South China Sea)
from the marine coelenterate *Junceella fragilis* (southern coast of Taiwan)
from the marine coelenterate *Junceella juncea* (South China Sea)
from the marine coelenterate *Lobophytum sp.* (Indian Ocean)
from the marine coelenterate *Lobophytum* species (Andaman and Nicobar Islands)
from the marine coelenterate *Menella verrucosa* (South China Sea)
from the marine coelenterate *Muricea cf. purpurea* (Panama)

from the marine coelenterate *Nephthea armata* (Taiwan)
from the marine coelenterate *Nephthea chabrolii* (Taiwan)
from the marine coelenterate *Sarcophyton glaucum* (Kenya)
from the marine coelenterate *Sarcophyton glaucum* (Kitungamwe Reef, Kenya)
from the marine coelenterate *Sarcophyton glaucum* from Kenya
from the marine coelenterate *Sarcophyton* sp. (Hainan Is., China)
from the marine coelenterate *Sarcophyton tortuosum* (Hainan Is.)
from the marine coelenterate *Scleronephthya* species (South China Sea)
from the marine coelenterate *Sinularia nanolobata* (Taiwan)
from the marine coelenterate *Sinularia scabra* (Taiwan)
from the marine coelenterate *Subergorgia mollis* (Taiwan)
from the marine cyanobacterium *Lyngbya majascula*
from the marine dendroceratid sponge *Aplysilla rosea*
from the marine dendroceratid sponges *Aplysilla rosea*, *Dendrilla rosea*, *Aplysilla polyrhaphis*, *Chelonaplysilla violacea*, and the nudibranchs *Chromodoris obsoleta* and *Chromodoris inopinata*.
from the marine dendroceratid sponges *Aplysilla rosea* *Chromodoris obsoleta* and *Chromodoris inopinata*.
from the marine dinoflagellate *Dinophysis fortii*
from the marine dinoflagellate *Dinophysis* sp.
from the marine dinoflagellate *Protoceratium reticulatum*
from the marine fungus *Coniothyrium* sp. associated with the sponge *Ectyplasia perox*
from the marine fungus *Hortaea werneckii* growing on the sponge *Aplysina aerophobia*
from the marine fungus *Pestalotia* sp., found on the surface of the brown alga *Rosenvingea* sp. in the Bahamas
from the marine gorgonian *Junceella juncea* (South China Sea)
from the marine gorgonian *Petrosaspongia elisabethae*
from the marine gorgonian *Pseudopterogorgia australiensis* (Indian Ocean)
from the marine hydroid *Gymnangium regae* from the Philippines
from the marine hydroid *Lytocarpus philippinus* from the Red Sea
from the marine invertebrate *Cladiella kashmani* (Alcyoniidae) from southern Mozambique
from the marine lithistid sponge *Callipelta* sp.
from the marine mollusk *Chromodoris luteorosea* and the sponge *Spongia zimocca*
from the marine mollusk *Chromodoris luteorosea*, and the nudibranch *Chromodoris geminus*
from the marine mollusk *Chromodoris obsoleta*
from the marine mollusk *Mytilus galloprovincialis* (coast of Italy)
from the marine mollusk *Pleurobranchus albiguttatus* and *P. forskalii* (Philippines)
from the marine mollusk *Pleurobranchus forskalii*
from the marine mussels *Mytilus edulis* and *Cerastoderma edule* in the presence of a *Dinophysis acuta* bloom (from the coast of Norway)
from the marine New Zealand cockle *Austrovenus stutchburyi*, as well as the mollusc species *Perna canaliculus* and *Crassostrea gigas*
from the marine nudibranch *Glossodoris rufomarginata* (South China Sea)
from the marine *Oceanapiside* sp.
from the marine organism *Aplidium albicans*
from the marine organism *Junceella juncea*
from the marine organism *Lobophytum* sp.
from the marine organism *Psammocinia* sp.
from the marine red alga *Asparagopsis taxiformis*
from the marine red alga *Laurencia rigida*
from the marine red alga *Laurencia* sp.
from the marine red alga *Plocamium cartilagineum*
from the marine red alga *Porphyra yezoensis*
from the marine 'sea fir' *Abietinaria* sp.
from the marine sea pen *Gyrophyllum sibogae* (South Africa)
from the marine sea pen *Pteroides* species (Indonesia)
from the marine sea plume *Pseudopterogorgia kallos* (Caribbean)
from the marine seawhip *Ellisella* species (Okinawa)
from the marine snail *Conus geographus*
from the marine snail *Conus magus*
from the marine snail *Conus* sp.
from the marine snail *Conus striatus*
from the marine soft coral *Lemnalia cervicorni* (Taiwan)
from the marine soft coral *Nephthea* sp. (Andaman and Nicobar Islands, Indian Ocean)
from the marine soft coral *Pseudopterogorgia elisabethae*
from the marine species *Diazona angulata*
from the marine sponge *Aptos* sp. from Indonesia
from the marine sponge *Acanthella carteri* from the Hanish Islands
from the marine sponge *Acanthella cavernosa*

from the marine sponge *Acanthella cavernosa* (Philippines)
from the marine sponge *Acanthodendrilla* sp. (Indonesia)
from the marine sponge *Acanthodendrilla* sp. (Sulawesi, Indonesia)
from the marine sponge *Acanthostrongylophora* sp. from Indonesia
from the marine sponge *Acanthostrongylophora* sp. from Indonesia, and the Caribbean sponge *Plakortis simplex*
from the marine sponge *Agelas longissima*
from the marine sponge *Agelas* sp.
from the marine sponge *Agelas* sp. (Papua New Guinea)
from the marine sponge *Agelas* sp. from Okinawa
from the marine sponge *Agelas wiedenmeyeri*
from the marine sponge *Amphimedon* sp. (Southern Japan)
from the marine sponge *Auletta* sp. (Papua New Guinea)
from the marine sponge *Axinella carteri* and the Okinawan sponge *Agelas nakamurai*
from the marine sponge *Axinella* cf. *bidderi* (Yemen, Indian Ocean)
from the marine sponge *Axinella* sp.
from the marine sponge *Axinyssa* sp.
from the marine sponge *Axinyssa* sp. (Thailand)
from the marine sponge *Axinyssa aplysinoides* (Indonesia)
from the marine sponge *Brachiaster* sp. (Thailand)
from the marine sponge *Cacospongia mycijiensis*
from the marine sponge *Callyspongia abnormis* (Kenya)
from the marine sponge *Chondrosia corticata* (Guam)
from the marine sponge *Cinachyrella australiensis* from China
from the marine sponge *Cinachyrella australiensis* from south China
from the marine sponge *Clathria* (*Thalysias*) *abietina*, (Philippines)
from the marine sponge *Cliona nigricans* from Italy
from the marine sponge *Cribrochalina olemda*
from the marine sponge *Cymbastela* sp.
from the marine sponge *Dactylospongia elegans* (Flores, Indonesia)
from the marine sponge *Dendrilla membranosa* (Anvers Is., Antarctic)
from the marine sponge *Diacarnus* cf. *spinopoculum*
from the marine sponge *Diacarnus erythraenus* from the Red Sea
from the marine sponge *Diacarnus spinopoculum*
from the marine sponge *Didiscus* sp. (Thailand)
from the marine sponge *Discodermia calyx*
from the marine sponge *Discodermia calyx* from Japan
from the marine sponge *Discodermia dissoluta*
from the marine sponge *Discodermia polydiscus* (Bahamas)
from the marine sponge *Dragmacidon* species (Adaman Islands, India)
from the marine sponge *Dysidea arenaria*
from the marine sponge *Dysidea avara*
from the marine sponge *Dysidea dendyi*
from the marine sponge *Dysidea herbacea* (Yap, Micronesia)
from the marine sponge *Fascaplysinopsis reticulata* (Indonesia)
from the marine sponge *Fascaplysinopsis* sp., recently also found in *Didemnum* sp.
from the marine sponge *Forcepia* species (west coast of Florida)
from the marine sponge *Geodia barretti*
from the marine sponge *Geodia* sp.
from the marine sponge *Halichondria panicea* (Sea of Japan, Russia)
from the marine sponge *Haliclona* species (Sulawesi, Indonesia)
from the marine sponge *Haliclona viscosa* (Norwegian Arctic Ocean)
from the marine sponge *Haliclona viscosa* (Russian Arctic Ocean)
from the marine sponge *Hamigera hamigera* from the Mediterranean
from the marine sponge *Hemiasterella minor*
from the marine sponge *Homaxinella* sp.
from the marine sponge *Homaxinella* sp. from Korea
from the marine sponge *Hyatella* sp. from Kenya
from the marine sponge *Hyrtilos erectus* (Hainan Is., China)
from the marine sponge *Hyrtilos* sp. (Red Sea)
from the marine sponge *Ianthella basta* (Guam)
from the marine sponge *Ircinia ramosa* (Borneo)
from the marine sponge *Ircinia* sp.
from the marine sponge *Lamellodysidea chlorea* from Queensland
from the marine sponge *Latrunculia brevis* (Argentina)
from the marine sponge *Lendenfeldia* sp. (Madagascar)
from the marine sponge *Leucetta chagosensis* (Sulawesi, Indonesia)

from the marine sponge *Leucetta* sp. (Papua New Guinea)
from the marine sponge *Luffariella* sp. (Palau)
from the marine sponge *Meloplus sarassinorum*
from the marine sponge *Monanchora* sp.
from the marine sponge *Monanchora unguiculata* (Maldive Islands)
from the marine sponge *Monanchora unguifera* (Jamaica)
from the marine sponge *Mycale cecilia* from the Gulf of California, Mexico
from the marine sponge *Mycale magellanica* from Japan
from the marine sponge *Mycale* sp.
from the marine sponge *Myriastr* *clavosa*, from the Philippines
from the marine sponge *Neamphius huxleyi* (Papua New Guinea)
from the marine sponge *Negombata* (*Latrunculia*) *magnifica* 335 (Gulf of Eilat, Red Sea)
from the marine sponge *Neopetrosia exigua*
from the marine sponge *Neopetrosia exigua* (formerly *Xestospongia exigua*) from Palau
from the marine sponge *Oceanapia fistulosa* (New Caledonia)
from the marine sponge *Oceanapia* sp. from south Australia
from the marine sponge *Pachychalina* sp
from the marine sponge *Pachychalina* sp. from Brazil
from the marine sponge *Pellina triangulata*
from the marine sponge *Penares schulzei* (Hachijo-kojima Is., Japan)
from the marine sponge *Penares* sp. from Japan
from the marine sponge *Petrosaspongia nigra*
from the marine sponge *Petrosia* (*Strongylophora*) *corticata* (Papua New Guinea)
from the marine sponge *Petrosia elastica* from Taiwan
from the marine sponge *Petrosia* sp.
from the marine sponge *Petrosia* sp. (Philippines)
from the marine sponge *Peudaxinyssa cantharella*
from the marine sponge *Phorbas amaranthus* (Florida)
from the marine sponge *Phyllospongia dendyi* (Palau)
from the marine sponge *Phyllospongia madagascarensis* (Madagascar)
from the marine sponge *Plakortis anglospiculatus* from the Dominican Rep.
from the marine sponge *Plakortis nigra* (Sulawesi, Indonesia)
from the marine sponge *Plakortis quasiampfiaster*
from the marine sponge *Plakortis quasiampfiaster*, also from the Indo-Pacific *Xestospongia* cf. *carnonaria*
from the marine sponge *Plakortis simplex* (Bahamas)
from the marine sponge *Plakortis* sp.
from the marine sponge *Plakortis* sp. from the Canary Islands
from the marine sponge *Psammaplysilla purpurea*
from the marine sponge *Psammaplysilla purpurea* (India)
from the marine sponge *Psammocinia* sp.
from the marine sponge *Psammocinia* sp. (Korea)
from the marine sponge *Psammocinia* sp. from Papua New Guinea
from the marine sponge *Ptilocaulis spiculifer*
from the marine sponge *Raspailia* sp.
from the marine sponge *Raspailia* sp. (Madagascar)
from the marine sponge *Raspailia* sp. from Kenya
from the marine sponge *Reidisporgia coerulea*
from the marine sponge *Rhabdastrella* aff. *distincta* (Hainan Is., China)
from the marine sponge *Scleritoderma nodosum* (Philippines)
from the marine sponge *Siliquariaspongia japonica*
from the marine sponge *Smenospongia* sp. (Korea)
from the marine sponge *Spirastrella coccinea*
from the marine sponge *Spongia agaricina*
from the marine sponge *Spongia officinalis*
from the marine sponge *Spongia* sp.
from the marine sponge *Spongia* sp. from China
from the marine sponge *Spongia* sp. from Japan
from the marine sponge *Spongia* sp. from the Philippines
from the marine sponge *Spongia species* (Vanuatu)
from the marine sponge *Spongia zimocca*
from the marine sponge *Stelletta globostellata*
from the marine sponge *Stoeba extensa* (Japan)
from the marine sponge *Stylissa* aff. *massa*
from the marine sponge *Stylissa caribica*
from the marine sponge *Stylissa* sp. (Okinawa)
from the marine sponge *Stylissa* sp. from Okinawa

from the marine sponge *Stylotella aurantium* (Great Barrier Reef)
from the marine sponge *Suberea* (Lihou reef, Coral Sea)
from the marine sponge *Suberites caminatus* (King George Is., Antarctica)
from the marine sponge *Terpios hoshinota* (Okinawa)
from the marine sponge *Theonella cupola*
from the marine sponge *Theonella mirabilis*
from the marine sponge *Thorectandra* species (Palau)
from the marine sponge *Topsentia ophiraphidites* from Colombia
from the marine sponge *Topsentia ophiraphidites* from Jordan
from the marine sponge *Verongia aerophoba*
from the marine sponge *Verongia aerophoba*
from the marine sponge *Xestospongia exigua* from Papua New Guinea
from the marine sponge *Xestospongia sapra*
from the marine sponge *Xestospongia* sp.
from the marine sponge *Xestospongia* sp. (Japan)
from the marine sponge *Xestospongia testudinaria*
from the marine sponges *Callipelta* sp. and *Latrunculia* sp.
from the marine sponges *Hemiasasterella minor*, *Cymbastella* sp., *Auleta* sp., and *Siphonochalina* sp.
from the marine sponges *Spongia officinalis*, *Chelonaplysilla violacea*, and *Aplysilla sulphurea*
from the marine strain (BM939) of *Aspergillus fumigatus*
from the marine *Streptomyces* sp. isolate B8652 BCC 5149
from the marine tubeworm *Cephalodiscus gilchristi*
from the marine tunicate *Rhopalaea* sp.
from the marine wall sponge *Spirastrella spinispirulifer* from southern Africa
from the medfly, *Caeratitis capitata*
from the medicinal plant *Rollinia mucosa*
from the Mediterranean green alga *Caulerpa* sp.
from the Mediterranean mollusc *Murex trunculus*
from the Mediterranean nudibranch *Doris verrucosa*
from the Mediterranean shrub/tree carob, *Ceratonia siliqua*
from the Mediterranean sponge *Agelas oroides*
from the Mediterranean sponge *Aplysina cavericola*
from the Mediterranean sponge *Fasciospongia cavernosa*
from the Mediterranean sponge *Halicortex* sp.
from the Mediterranean sponge *Spongionella gracilis*
from the Mediterranean tunicate *Aplidium conicum*
from the Mexican plant *Ageratum houstonianum* Mill (Asteraceae)
from the Mexican plants *Guatteria diospyroides* Baill. and *Annona squamosa* L.
from the Mexican sponge *Aplysina gerardogreeni*
from the Mexican tree *Andira inermis*
from the microbe *Actinomadura* sp.
from the microbe *Actinomadura* sp. MK 73-NF4
from the microbe *Actinomadura* sp. MK 73-NF5
from the microbe *Actinomadura spiralis*
from the microbe *Actinoplanes deccanensis*
from the microbe *Actinoplanes* sp.
from the Micronesian ascidian *Eudistoma* sp.
from the Micronesian octocoral *Briareum stechei*
from the Micronesian sponge *Oceanapia* sp.
from the microorganism *Eupenicillium shearii*
from the microorganism *Streptomyces rugosporus*
from the middle Eastern shrub *Astragalus* sp., especially *A. gummifer*
from the mistletoe plant *Viscum album*
from the mollusk *Cadlina luteomarginata*
from the mollusk *Ceratosoma epicuria*
from the mollusks *Glossodoris atromarginata* and *Casella atromarginata*
from the Moloka'i sponge *Verongida* sp.
from the Moroccan marine sponge *Hippospongia communis*
from the moss *Atrichum undulatum*
from the moss *Atrichum undulatum*, and the moss *Polytrichum formosum*
from the moss inhabiting fungus *Hypholoma elongatum*
from the moss *Polytrichum formosum*
from the moss *Polytrichum formosum*, and the moss *Atrichum undulatum*
from the muricid gastropod *Drupella fragum*
from the mushroom *Amanita castanopsidis* Hongo
from the mushroom *Amanita gymnopus*

from the mushroom *Amanita miculifera*
from the mushroom *Amanita phalloides*
from the mushroom *Amanita veragineoides*
from the mushroom *Lactarius mitissimus*
from the mushroom *Russula subnigricans*
from the mushroom *Thelephora aurantiotincta*
from the mushroom *Thelephora vialis*
from the mushroom *Tricholoma aurantium*
from the mussel *Mytilus edulis* (Ireland)
from the mussel *Mytilus edulis* (Toyama Bay, Japan Sea), from a cultured marine fungus, *Aspergillus* sp.
from the mycelial cake of the marine *Micromonospora* sp.; strain L-13-ACM2-092
from the mycelial
cultures of *Calocybe gambosa* and fruiting bodies of *Pycnoporus sanguineus*
from the mycelium of the strain *Streptomyces* sp. (BL-49-58-005)
from the mycophilic deuteromycete *Cladobotryum rubrobrunnescens*
from the myxobacterium *Chondromyces crocatus*
from the myxobacterium *Sorangium cellulosum*
from the neem tree (*Azadirachta indica*)
from the New Caledonian ascidian *Lissoclinum voeltzkowi*
from the New Caledonian deep water sponge *Drummacidon* sp.
from the New Caledonian sponge *Orina* sp.
from the New Caledonian sponge *Pseudoaxinyssa cantharella*
from the New Guinean plant *Glochidion philippicum* (Euphorbiaceae)
from the new species *Penicillium thiersii*
from the New Zealand ascidian *Cnemidocarpa bicornuta*
from the New Zealand ascidian *Pycnoclavella kottae*
from the New Zealand marine sponge *Mycale* sp.
from the New Zealand sea hare *Bursatella leachii*
from the New Zealand sponge *Chelonaplysilla violacea*
from the New Zealand sponge *Chelonaplysilla violacea*, and the sponge *Dendrilla membranosa*

from the New Zealand sponge *Chelonaplysilla violacea*, from the marine sponge *Dendrilla membranosa* (South Shetlands, Antarctic)
from the New Zealand sponge *Clathria lissosclera*
from the New Zealand sponge *Hamigera tarangaensis*
from the North American 'cup plant' *Silphium perfoliatum*
from the North Sea bacterium *Janibacter limosus*
from the northeastern Pacific nudibranch *Cadlina luteomarginata*
from the Northern Caribbean gorgonian *Erythropodium caribaeorum*
from the nudibranch *Acanthodoris nanaimoensis*
from the nudibranch *Casella atomarginata*
from the nudibranch *Casella atomarginata* and sponges of the genus *Spongia*
from the nudibranch *Chromodoris luteoroseo*
from the nudibranch *Chromodoris norrisi*
from the nudibranch *Hypselodoris capensis* (Chromodorididae), from South Africa
from the nudibranch *Jorunna funebris* (Mandapam, India)
from the nudibranch *Phyllidiella pustulosa*, (Hainan Is., South China Sea)
from the nudibranch *Tochuina tetraquetra* and its dietary soft coral *Gersemia rubiformis*
from the nudibranch, *Chromodoris hamiltoni*, from South Africa
from the nudibranch, *Leminda millecra*, from South Africa
from the octocoral *Charijoa riisei*
from the oil-degrading marine bacterium *Marinobacter hydrocarbonoclasticus*
from the Okinawan alga *Laurencia majuscula*
from the Okinawan alga *Laurencia mariannensis*
from the Okinawan ascidian *Lissoclinum* sp. and the Okinawan sponge *Ircinia* sp.
from the Okinawan bivalve *Pinna muricata*
from the Okinawan *Laurencia* sp.
from the Okinawan *Laurencia yonaguniensis*
from the Okinawan marine sea star *Linckia laevigata*
from the Okinawan marine sponge *Amphimedon* sp.
from the Okinawan marine sponge *Psammoplysilla purpurea*
from the Okinawan marine sponge *Xestospongia bergquistia*
from the Okinawan nudibranch *Reticulidia fungia*
from the Okinawan soft coral *Clavularia viridis*
from the Okinawan sponge *Aptos aptos*
from the Okinawan sponge *Acanthella* sp.
from the Okinawan sponge *Agelas nakamurai*

from the Okinawan sponge *Hymeniacidon* sp.
from the Okinawan sponge *Psammoplysilla purpurea*
from the Okinawan sponge *Pseudoceratina purpurea*
from the Okinawan sponge *Subera* sp.
from the Okinawan sponge *Theonella* sp.
from the Okinawan tunicate *Rhopalaea* sp.
from the orange-colored gorgonian *Acalycigorgia intermis*
from the orange-red caps of the fungus *Tricholoma aurantium*
from the orange-red caps of the fungus *Tricholoma aurantium*, from the cap skins of *Xerocomus badius*, from the gleba of the gasteromycete *Pisolithus arhizus*
from the Pakistan aromatic herb *Mentha longifolia*
from the Palauan ascidian *Distaplia regina*
from the Palauan deep water (~ 130 m) sponge *Plakortis nigra*
from the Palauan marine cyanobacterium *Lyngbya* sp.
from the Palauan marine sponge *Microciona eurypha*
from the Palauan sponge *Chelonoaplysilla* sp.
from the Palauan sponge *Dendrilla* sp.
from the Panamanian golden frog, *Atelopus zeteki*
from the Papua New Guinea sponge *Agelas nakamurai*
from the Papua New Guinea sponge *Cymbastela* sp.
from the parasitic fungus *Cylindrocarpon olidum*
from the Patagonian nudibranch *Tyrinna nobilis*
from the Patagonian sponge *Cliona chilensis*
from the pathogenic fungus *Armillaria novae-zelandiae*
from the pathogenic fungus *Candida albicans*
from the *Penicillium fellutanum* strain F-3020
from the perennial herb *Helianthella quinquenervis*
from the Peruvian medicinal plant *Jatropha cillata*
from the Philippine marine sponge *Acanthella cavernosa*
from the Philippine marine sponge *Xestospongia ashmorica*
from the Philippine plant *Mikania cordata*
from the Philippine sponge *Xestopongia* sp.
from the Philippine sponge *Zyza fuiginosa*
from the plant Lily of the Valley (*Covallaria majalis*)
from the plant *Abelia grandiflora* (Caprifoliaceae)
from the plant *Acangelisia gusalung*
from the plant *Acangelisia gusalung*, from Goldenseal
from the plant *Achillea millefolium*
from the plant *Adenocarpus complicatus*, subspecies *aureus* (Papilionacea)
from the plant *Agropyron georginae*
from the plant *Alangium lamarckii*
from the plant *Almeidia rubra*
from the plant *Almeidia rubra*, from stems of the plant *Metrodorea flavida*
from the plant *Almeidia rubra*, the plant *Skimmia laureola*, from a variety of plants of the *Haplophyllum* sp.
from the plant *Aloe ferox*
from the plant *Aloe sabaea*
from the plant *Ancistrocladus cochinchinensis*
from the plant *Ancistrocladus guineaensis*
from the plant *Ancistrocladus heyneanus*
from the plant *Ancistrocladus korupensis*
from the plant *Ancistrocladus tanzaniensis*
from the plant *Anisocycla jollyana*
from the plant *Annona cherimola*
from the plant *Annona coriacea*
from the plant *Annona glabra*
from the plant *Annona muricata*
from the plant *Annona purpurea*
from the plant *Annona purpurea* (Annonaceae)
from the plant *Annona senegalensis* (Annonaceae), from bark of the Brazilian trees *Xylopi amazonica* and *X. aromatica*
from the plant *Annona spinescens*
from the plant *Annona squamosa*
from the plant *Anthemis abroatanum*
from the plant *Anthemis absinthium*
from the plant *Anthemis martima*
from the plant *Anthemis nobilis*
from the plant *Aristolochia arcuata*

from the plant *Aristolochia constricta*
from the plant *Aristolochia gigantea*
from the plant *Aristolochia manchurensis*
from the plant *Aristolochia triangularis*
from the plant *Aristolochia tubiflora*
from the plant *Arnica sachalinensis*
from the plant *Artabotrys zelanicus*
from the plant *Asimina triloba*
from the plant *Aundo donax*
from the plant *Berberis amurensis*
from the plant *Berberis densiflora*
from the plant *Berberis integerrima*
from the plant *Berberis numularia*
from the plant *Berberis numularis*
from the plant *Berberis* sp.
from the plant *Berberis turcomanica*
from the plant *Berberis virgetorum*
from the plant *Berberis vulgaris*
from the plant bloodroot, *Sanguinaria canadensis*
from the plant *Bolusanthus speciosus*
from the plant *Brucea javanica*
from the plant *Bruguiera sexangula* (Sapotaceae),
from the plant *Cassytha filiformis*
from the plant *Centaurea gladifolia*
from the plant *Centaurea scoparia*
from the plant *Cephalotaxus fortunei*
from the plant *Ceratocarpus heterocarpa*
from the plant *Chenopodium ambrosioides* (Chenopodiaceae)
from the plant *Chenopodium ambrosioides* (Chenopodiaceae)
from the plant *Chloranthus holostegius*
from the plant *Cissampelos pareira*
from the plant *Cissampelos sympodialis*
from the plant *Citrus hassaku*
from the plant *Citrus limonia*
from the plant *Citrus paradisi*
from the plant *Clivia nobilis*
from the plant *Cocculus hirsutus*
from the plant *Cocculus laurifolius*
from the plant *Coccus trilobus*
from the plant *Colchicum ritchii*
from the plant *Coriandrum sativum*
from the plant *Coridothymus capitatus*
from the plant *Corydalis cava* L. (Fumarioideae)
from the plant *Corydalis decumbens*
from the plant *Corydalis turtschaninovii*
from the plant *Crinum bulbispermum*
from the plant *Crinum macowanii*
from the plant *Crinum macowanii*, from *Sceletium* sp.,
from the plant *Critonia morifolia* (formerly *Eupatorium morifolia*), (Asteraceae) from Mexico
from the plant *Critonia morifolia* (formerly *Eupatorium morifolia*), (Asteraceae) from Mexico, from roots, leaves and flowers of the plant
Prestonia amabilis from montane rainforest in southern Ecuador
from the plant *Cymbopogon citratus*
from the plant *Cymbopogon winterianus* (Graminae) and related species
from the plant *Dactylocarpus torulosa*
from the plant *Daphniphyllum humile*
from the plant *Daphniphyllum* sp.
from the plant *Dichapetalum cymosum*
from the plant *Dichapetalum toxicarium*
from the plant *Digitalis purpurea* (Scrophulariaceae)
from the plant *Diospyros montana* (Ebenaceae)
from the plant *Ephedra sinica*
from the plant *Erythroxylum* sp.
from the plant *Eucalyptus* sp. (Myrtaceae)
from the plant *Eugenia* sp.
from the plant *Eysenhardtia polystachya* (Leguminosae)
from the plant *Ferula assafoetida*

from the plant *Ferula* sp.
from the plant *Ficus carica*
from the plant *Ficus pantoniana* (Moraceae)
from the plant *Fumaria densiflora*
from the plant *Fumaria indica* (Fumariaceae) from Pakistan
from the plant *Galanthus elwesii*
from the plant *Galanthus gracilis*
from the plant *Galanthus plicatus*
from the plant *Galbulimima belgraveana*
from the plant *Garcinia vieillardii*
from the plant *Genista lydia*, and from the plant *Lupinus albus albus*
from the plant *Glinus oppositifolius*
from the plant *Glycosmis citrifolia*
from the plant *Goniothalamus giganteus*
from the plant *Guarea multiflora*
from the plant *Guarea multiflora*, and *Azadirachta excelsa*
from the plant *Haemanthus albiflos*
from the plant *Haemanthus paucifolius*
from the plant *Heimia salicifolia* (Lythraceae)
from the plant *Hernandia nymphaeifolia*
from the plant *Hernandia sonora*
from the plant *Heterothalamus psiadioides*
from the plant *Hovea longipes*
from the plant *Hymenocallis festalis*, from the bulbs of *Crinum yemense*
from the plant *Hymenocallis guianensis*
from the plant *Hymenocallis lobata*
from the plant *Hypecoum leptocarpum*
from the plant *Hypecoum procumbens*
from the plant *Hypericum chinense*
from the plant *Illicium tashiroi*
from the plant *Incarvillea sinensis*
from the plant *Inula helenium* (Compositae)
from the plant *Isolona* sp.
from the plant *Jaborosa runcinata*
from the plant *Jaborosa sativa*
from the plant *Jasonia glutinosa*
from the plant *Khaya senegalensis*
from the plant *Kniphophia foliosa*
from the plant kohlrabi [German]
from the plant *Laucjum aestivum*
from the plant *Laurella sempervirens*
from the plant *Leucjum aestivum*
from the plant *Litsea cubeba*
from the plant liverwort *Plagiochila* sp.
from the plant *Luffa cylindrica*, and others
from the plant *Lupinus campestris*
from the plant *Lupinus densiflora*, and the plant *Genista ovata*
from the plant *Macleaya cordata*
from the plant *Magnolia officinalis*
from the plant *Matricaria recutita*
from the plant *Meconopsis quintuplinerva*
from the plant *Melaleuca alternifolia*
from the plant *Mentha villosa*
from the plant *Merendera robusta*
from the plant *Metrodorea flavida*
from the plant *Murraya exotica*
from the plant *Murraya paniculata*
from the plant *Narcissus angustifolius*
from the plant *Narcissus bulbocodium*
from the plant *Narcissus serotinus*
from the plant *Narcissus* sp.
from the plant *Nectandra salicifolia*
from the plant *Nerium oleander* (Apocynaceae)
from the plant *Ophiorrhiza blumeana* Korth. (Rubiaceae)
from the plant *Panax ginseng*
from the plant *Papaver pseudo-orientale*

from the plant *Papaver triniifolium*
from the plant *Pentaceras australis* (Rutaceae)
from the plant *Phellodendron amurense*
from the plant *Phlomis younghusbandii*
from the plant *Phoebe formosana*
from the plant *Phoebe laceolata* (Lauraceae)
from the plant *Piper hispidum* (Piperaceae)
from the plant *Piper* sp.
from the plant *Piper* sp., also from the stem wood and leaves of *Hibiscus tiliaceus* and stem wood of the plant *Zanthoxylum integrifoliolum*
from the plant poison ivy, *Toxicodendron radicans*
from the plant *Polygonum tinctorium*
from the plant *Premna subscandens*
from the plant *Prismatomeris tetrandra*
from the plant *Pseudoxandra sclerocarpa*
from the plant *Psoralea corylifolia*
from the plant *Psychotria rostrata*
from the plant *Pterocaulon purpurascens*
from the plant *Quilegia ecalcarate* (Ranunculaceae)
from the plant *Rabdosia ternifolia*
from the plant *Roemeria hybrida*
from the plant *Rollinia mucosa*
from the plant *Rosa rugosa*
from the plant *Rosemarinus officinalis*
from the plant *Salvia pachystachys* (Lamiaceae)
from the plant *Santalum album* (Santalaceae)
from the plant *Scrophularia auriculata*
from the plant *Sideritis massoniana*
from the plant St. Johns Wort (*Hypericum perforatum*)
from the plant *Stemona cochinchinensis*
from the plant *Stemona saxorum*
from the plant *Stemona sessilifolia*
from the plant *Stemona* sp.
from the plant *Stemona tuberosa*
from the plant *Stephania cepharantha*
from the plant *Stephania tetrandra*
from the plant *Stephania venosa*
from the plant *Strychnos* sp.
from the plant *Strychnos* spp.
from the plant *Tabernaemontana divaricata* (Apocynaceae), common in gardens in tropical countries
from the plant *Tabernaemontana divaricata* (Apocynaceae), common in gardens in tropical countries, from bark and roots of the bushy plant *Peschiera campestris* from Brazil
from the plant *Tabernaemontana laeta*, Mart., (Apocynaceae)
from the plant *Telotoxicum krukovii*
from the plant *Thalictrum sessile* (Ranunculaceae)
from the plant *Thalictrum sessile* (Ranunculaceae), from the plant *Hernandia sonora*
from the plant *Thymus vulgaris*
from the plant *Triphasia trifolia*
from the plant *Triphyophyllum peltatum*
from the plant *Triphyophyllum peltatum* (Dinophyllaceae)
from the plant *Trypterygium wilfordii*
from the plant *Uvaria calamistrata*
from the plant *Uvaria tonkinensis*
from the plant *Valeriana officinalis*
from the plant *Vepris uguenensis* from Kenya
from the plant *Verbena littoralis*, widely used in traditional folk remedies
from the plant *Vismia guineensis*
from the plant whiskbroom parsley, *Harbouria trachypleura*
from the plant *Zanthoxylum roifolium*
from the plant *Zanthoxylum usambarense*
from the plant *Zea mays*
from the plants *Alchornea cordifolia*, and *Sida acuta*
from the plants *Androcymbium* sp., including *A. gramineum*, *A. hierrense*, *A. palaestinum*, *A. psammophilum*, and *A. wyssianum*
from the plants *Calophyllum caledonicum* and *Garcinia* sp.
from the plants *Corydalis bulbosa*, and *C. pallida* (Fumariaceae)
from the plants *Crinum bulbispermum*, *Crinum yemense*

from the plants *Crinum macowanii*, *Crinum bulbispermum*, bulbs of *Crinum yemense*
from the plants *Papaver somniferum* and *Argemone grandiflora*
from the plants *Pterocaulon virgatum*, *Pterocaulon balansae*
from the plants *Salvia divinorum*, and 'Kratom' *Mitragyna speciosa*
from the plants *Warburgia salutaris*, *Vernonia colorata*, *Erythrina lysistemon*
from the Philippine red alga *Laurencia* sp.
from the Pohnpei sponge *Dysidea fragilis*
from the Pohnpei sponge *Spongia* sp.
from the Pohnpeiian sponge *Chelonaplysilla* sp.
from the Pohnpeiian sponge *Chelonaplysilla* sp., and the Cantabrian nudibranch *Chromodoris luteorosea*
from the polypore fungus *Bondarzewia montana*
from the polypore fungus *Piptoporus australiensis*
from the polypore fungus *Piptoporus polycephalum*
from the Portugese red alga *Plocamium cartilagineum*
from the Portuguese coast alga *Plocamium* sp.
from the predacious fungus *Arthrobotrys oligospora*
from the rainforest tree *Elaeocarpus grandis* from Queensland
from the rainforest tree *Elaeocarpus habbeniensis* from Queensland
from the rainforest tree *Elaeocarpus kaniensis*
from the rainforest tree *Elaeocarpus* sp.
from the rainforest tree *Peripentadenia mearsii*
from the rare, inedible fungus *Entonaema splendens* (Xylariaceae)
from the red alga *Chondria atropurpurea*
from the red alga *Dasyphila plumariodes*
from the red alga *Gracilaria coronopifolia*
from the red alga *Gracilaria verrucosa* (Sea of Japan)
from the red alga *Jania rubens* (Red Sea coast of Egypt)
from the red alga *Laurencia filiformis*, and the Caribbean sponge *Plakortis* sp.
from the red alga *Laurencia intricata* (Discovery Bay, Jamaica)
from the red alga *Laurencia japonensis*
from the red alga *Laurencia luzonensis*
from the red alga *Laurencia microcladia*, found along the coast of Tuscany
from the red alga *Laurencia nipponica*
from the red alga *Laurencia nipponica* (Troitsa Bay, Sea of Japan)
from the red alga *Laurencia obtusa*
from the red alga *Laurencia obtusa* (Isla Grande, Panama)
from the red alga *Laurencia obtusa* (Tekirova, Turkey)
from the red alga *Laurencia omaezakiana*
from the red alga *Laurencia* sp.
from the red alga *Laurencia* sp. from Tenerife
from the red alga *Martensia fragilis*
from the red alga *Osonthalia corymbifera*
from the red alga *Pantoneura plocamiodes* and the alga *Plocamium cartilagineum*
from the red alga *Peyssonnelia caulifera* (Yanuca Is., Fiji)
from the red alga *Plocamium cartilagineum*
from the red alga *Plocamium corallorhiza*
from the red alga *Plocamium hamatum* from Tenerife
from the red alga *Plocamioma* sp. from Tenerife
from the red alga *Polysiphonia aphaerocarpa*
from the red alga *Polysiphonia aphaerocarpa*, also produced by the green alga *Ulva lactuca*
from the red alga *Portieria hornemannii* from Hawaii and the Philippines
from the red alga *Prymnesium parvum*
from the red alga *Rhodomela confervoides* (Qingdao coast, China)
from the red alga *Sphaerococcus coronopifolius*
from the red alga *Symphocladia latiuscula*
from the red alga *Tichocarpus crinitus* (Katsurakoi coast of Japan)
from the red algae *Laurencia majuscula* and *Laurencia caraibica*
from the red ascidian *Botryllus leachi*
from the red Mediterranean seaweed *Laurencia microcladia*, collected off Elba Island
from the Red Sea coral *Sinularia gardineri*
from the Red Sea soft corals *Dendrophyllia* sp., *Dendronephthya* sp. (red), *Dendronephthya* sp. (yellow), and *Tubipora musica*
from the Red Sea sponge *Acanthella carteri*
from the Red Sea sponge *Dysidea* sp.
from the Red Sea sponge *Dysidea* sp.
from the Red Sea sponge *Dysidea* sp. and the nudibranch *Chromodoris annulata*
from the red seaweed *Laurencia claviformis*

from the red seaweed *Laurencia obtusa*
from the red seaweed *Laurencia viridis*
from the red seaweed *Portieria hornemannii*
from the red soft coral, *Alcyonium fauri* (Alcyoniidae) from South Africa
from the red tide alga *Prymnesium parvum*
from the root bark of *Margaritaria discoidea*
from the root bark of *Murraya eucrestifolia*
from the root bark of *Strychnos gossweileri*
from the root bark of Tanzanian *Strychnos panganensis*
from the root of the Chinese plant *Artabotrys uncinatus*
from the roots of *Aconitum kongboense* from China
from the roots of *Citrus hassaku*
from the roots of *Corydalis flabellata* (Fumariaceae)
from the roots of *Diospyros kakis*
from the roots of *Eurycoma longifolia*
from the roots of *Melodinus henryi* [Craib.]
from the roots of *Murraya koenigii*
from the roots of *Perriera madagascariensis*
from the roots of *Stemona japonica*
from the roots of *Thalictrum faberi* (Ranunculaceae)
from the roots of the plant *Eurycoma logifolia*
from the roots of the plant *Rumex patientia* from Turkey
from the roots of the Vietnamese plant *Stemona saxorum*
from the roots of *Trigonostemon reidioides*
from the Rubiaceae plant, *Uncaria attenuata* [Korth]
from the safflower plant, *Carthamus tinctorius*
from the Saudi Arabian plant *Rhus retinorrhoea* (Anacardiaceae)
from the sclerotia of *Aspergillus sulphureus*
from the sclerotoid ascostromata of *Eupenicillium shearii* (NRRL3324)
from the sea anemone *Condylactis gigantea* and the zoanthid *Palythoa caribaerorum*
from the sea anemone *Stoichactis helianthus*
from the sea cucumber *Pentacta quadranglasis* (South China Sea)
from the sea cucumber *Thyone aurea* (Namibia)
from the sea hare *Aplysia dactylomela*
from the sea hare *Aplysia dactylomela* from Tenerife
from the sea hare *Aplysia dactylomela*, present in its digestive gland
from the sea hare *Aplysia kurodai*
from the sea hare *Aplysia parvula* and *Laurencia filiformis*
from the sea hare *Aplysia punctata*
from the sea hare *Dolabella auricularia*
from the sea hare *Dolabella auricularia* (Gulf of California)
from the sea hare *Dolabella auricularia* (Japan)
from the sea hare *Dolabella auricularia* from Mauritius in the western Indian Ocean
from the sea hare *Stylocheilus longicauda*
from the sea hare *Stylocheilus longicauda* (which feeds on the blue-green alga *Lyngbya longicauda*)
from the sea slug *Elysia rufescens*
from the seaweed *Chondrus crispus*
from the seaweed *Tubinaria conoides*
from the seaweed *Ulva lactuca*
from the seaweed *Ulva lactuca* and from the New Caledonian sponge *Pseudoaxinyssa cantharella*
from the seed oil of the West African ratsbane shrub *Dichapetalum toxicarium*
from the seeds of *Celosia argentea*
from the seeds of *Idiospermum australiense*
from the seeds of *Psoralea corylifolia*
from the seeds of the Japanese tree *Hinoki-asunaro* (*Thujaopsis dolabrata* Sieb. et Zucc. var. *hondai* Makino)
from the Senegalese red alga *Ploesyphonia ferulacea*
from the seven-spot ladybird [beetle] *Coccinella septempunctata*
from the shelled pulmonate gastropod mollusc *Trimusculus costatus* from South Africa
from the skin of poisonous frogs and toads
from the skin of the Australian frog *Pseudophryne coriacea*
from the small leguminous tree or thorny shrub *Caesalpinia spinosa* (Molina) Kuntze, commonly known as tara, from Peru
from the soft coral *Capnella thyrsoidea*, collected in the Tsitsikamma Marine Reserve, South Africa
from the soft coral *Clavularia koellikeri* (Okinawa)
from the soft coral *Eleutherobia aurea*, collected from the Aliwal Shoal off southern KwaZulu-Natal, South Africa
from the soft coral *Nepthea erecta*
from the soft coral *Pieterfaurea unilobata*, South Africa

from the soft coral *Pseudopterogorgia elisabethae*
from the soft coral *Sinularia nanolobata* (Taiwan)
from the soft corals *Sinularia gibberosa* and *Sarcophyton trocheliophorum*
from the soil bacterium *Saccharopolyspora spinosa*
from the soil cyanobacteria *Hapalosiphon welwitschii* [W.]
from the soil fungus *Pseudeurotium zonatum* [van Beyma]
from the soil microbe *Chaetomium* sp.
from the soil-Actinomycete *Kibdelosporangium* sp.
from the solid mycelial cultures of *Dichomitus squalens*
from the solid-substrate fermentation cultures of the fungus *Gliocladium roseum*
from the South African marine sponge *Latrunculia bellae*
from the South African marine sponge *Strongylodesma aliwaliensis*
from the South African marine sponge *Tsitsikamma favus*
from the South African marine sponge *Tsitsikamma pedunculata*
from the South African nudibranch *Chromodoris hamiltoni*
from the South African plant *Albuca fastigiata*
from the South African plant *Drimia delagoensis*
from the South African plant *Drimiopsis burkei*
from the South African plant *Drimiopsis maculata*
from the South African plant *Eucomis comosa*
from the South African plant *Eucomis schijffii*
from the south African plant *Nerine filifolia* (Amaryllidaceae)
from the South African sea hare *Aplysia dactylomela*
from the South African soil bacterium *Streptomyces platensis*
from the South African sponge *Hemiasterella minor*
from the South African sponge *Latrunculia* sp.
from the South African sponges *Latrunculia* sp., *Tsitsikamma favus*
from the South American plant *Bejanaroa balansae*
from the South American plant *Bejanaroa semistriata*
from the South American plant *Minuartia guianensis* (Olacaceae)
from the South American shrub *Mentzelia cordifolia*
from the South China Sea *Laurencia majuscula*
from the South China sea sponge *Dysidea fragilis*
from the South Pacific soft coral *Palythoa vestitus*
from the Southern Australian deep water sponge *Spongosorites* sp.
from the Southern Australian sponge *Echinodictyum* sp.
from the southern Kenya sponge *Dictyodendrilla* aff. *retiara*
from the sponge *Acanthella cavernosa*
from the sponge *Agelas clathrodes*
from the sponge *Agelas dendromorpha*
from the sponge *Agelas longissima*
from the sponge *Agelas mauritania*, inhibits growth of the barnacle *Balanus amphitrite*
from the sponge *Agelas nakamurai*
from the sponge *Agelas* sp.
from the sponge *Agelas sventres*
from the sponge *Ailochroia crassa*
from the sponge *Amphimedon terpenensis*, also from the sponge *Agelas* sp.
from the sponge *Ancorina* sp.
from the sponge *Aplysia rosea*
from the sponge *Aplysilla glacialis*
from the sponge *Aplysilla pallida*
from the sponge *Aplysilla polyrhaphis*
from the sponge *Aplysilla rosea*
from the sponge *Aplysinella rhax*
from the sponge *Aplysinella* sp.
from the sponge *Astrosclera willeyana*
from the sponge *Axinella brevistyla*
from the sponge *Axinella carteri*
from the sponge *Axinella carteri*, and the sponge
from the sponge *Axinella tenuidigitata*
from the sponge *Batzella* sp.
from the sponge *Callipelta* sp.
from the sponge *Callyspongia abnormis*
from the sponge *Coscinoderma* sp.
from the sponge *Cymbastela* sp.
from the sponge *Darwinella oxedata*

from the sponge *Darwinella oxeata* and the nudibranch *Cadlina luteomarginata*
from the sponge *Dendrilla rosea*, and the mollusk *Ceratosoma epicuria*
from the sponge *Dictyodendrilla cavernosa*
from the sponge *Dictyodendrilla cavernosa*, *Chelonaplysilla violacea*, and the mollusks *Chromodoris obsoleta*, *C. petechialis* and *C. inopinata*
from the sponge *Didiscus* sp.
from the sponge *Dysidea herbacea*
from the sponge *Dysidea herbacea*, Papua, New Guinea
from the sponge *Dysidea* sp.
from the sponge *Dysidea* sp. from Bararin Island, Philippines
from the sponge *Dysifea herbacea*, produced by the blue-green alga *Oscillatoria spongelliae*
from the sponge *Fascaplysinopsis reticulata*, from the tunicate *Didemnum* sp.
from the sponge *Geodia baretii*
from the sponge *Halichondria japonica*
from the sponge *Halichondria okadai*
from the sponge *Halichondria okadai*, from the marine sponge *Axinella* sp.
from the sponge *Hamigera tarangaensis*
from the sponge *Homophymia conferta*
from the sponge *Hyatella intestinalis* and sponges *Spongia* sp.
from the sponge *Hyatella intestinalis*, sponges of the genus *Spongia*, and the sponge *Rhopaloeides odorabile*
from the sponge *Hyatella intestinalis*, sponges of the genus *Spongia*, and the sponge *Rhopaloeides odorabile*
from the sponge *Hymeniacion* sp.
from the sponge *Hyrtilis erecta*
from the sponge *Ianthella basta*
from the sponge *Ianthella* sp.
from the sponge *Jaspis splendans* from Vanuatu
from the sponge *Latrunculia apicalis*
from the sponge *Microscleroderma* sp.
from the sponge *Monachora arbuscula*
from the sponge *Monachora unguiculata*
from the sponge *Neofolitispa dianchora*
from the sponge *Neosiphonia superstes*
from the sponge *Oceanapia* sp.
from the sponge *Phakellia fusca* [Thiele], collected from Yongxing Island (China)
from the sponge *Plakortis simplex*
from the sponge *Psammoplysilla purpurea*
from the sponge *Pseudoceratina pupurea*
from the sponge *Pseudoceratina purpurea*
from the sponge *Pseudoceratina verrucosa*
from the sponge *Ptilocaulis spiculifer*
from the sponge *Raphista lacazei*
from the sponge *Reniera fulva*
from the sponge *Sidonops microspinosa*
from the sponge *Spongia agaricina*
from the sponge *Spongia officinalis* var. *arabica*
from the sponge *Spongia zimocca* sensu
from the sponge *Spongionella gracilis*
from the sponge *Spongionella gracilis*, also from the encrusting sponge *Aplysilla tango*
from the sponge *Spongisorites genitrix*
from the sponge *Stylissa caribica*
from the sponge *Stylotella agminata*
from the sponge *Stylotella aurantium*
from the sponge *Stylotella aurantium*, found in the Yap Sea
from the sponge *Subera* sp.
from the sponge *Theonella* sp.
from the sponge *Theonella* sp., and *Theonella laevispirulifer*
from the sponge *Theonella swinhoei*
from the sponge *Tsitsikamma favus* from South Africa
from the sponge *Tsitsikamma pedunculata* from South Africa
from the sponge *Xestospongia* sp.
from the sponges *Aplysilla sulphurea* and *Darwinella* sp.
from the sponges *Igernella notabilis*, *Aplysia rosea*, and *Dendrilla rosea*
from the sponges *Igernella notabilis*, *Aplysia rosea*, *Dendrilla rosea*, and the mollusks *Chromodoris obsoleta* and *C. inopinata*
from the sponges *Latrunculia purpurea*, *Zyzya massalis*, *Z. fuliginosa*, and *Z. spp.*
from the sponges *Plakinastrella* sp. and *Plakortis* sp.
from the sponges *Spongia matamata* and *Coscinoderma mathewsi*

from the sponges *Spongia officinalis*, *Hyatella intestinalis*, *Spongia matamata*, and *Coscinoderma mathewsi*
from the sponges *Spongia officinalis*, *Hyatella intestinalis*, *Spongia matamata*, and *Coscinoderma mathewsi*, also from an unidentified
Dictyoceratid marine sponge from Papua New Guinea
from the Sri Lankan dorid nudibranch *Chromodoris gleniei*
from the starfish *Asterias rollestoni* (Yellow Sea, China)
from the starfish *Asterina pectinifera* (Pacific)
from the starfish *Certonardoa semiregularis* (Komun Is., Korea)
from the starfish *Henricia derjugini*
from the starfish *Henricia sanguinolenta*
from the starfish *Hippasteria phrygiana* (Sea of Okhotsk)
from the starfish *Lethasterias nanimensis chelifera* (Russia)
from the starfish *Luidia maculata* (Japan)
from the stem bark of *Kopsia deverrei*
from the stem bark of *Kopsia teoi*
from the stem bark of *Murraya koenigii*
from the stem bark of *Pleiolepis talbotii* [Wernham]
from the stem bark of the Indian plant *Dysoxylum binectariferum*
from the stem bark of the Madagascan plant *Hernandia voyronii*
from the stem of *Aglaia elliptifolia* (Meliaceae)
from the stem of *Strychnos vanprukii*
from the stem of the plant *Amomum krevanh*
from the stem of the plant *Piper arborescens*
from the stem of the plant *Quassia indica*
from the stems and leaves of cultivated Carolina jasmine, *Gelsemium sempervirens* [Ait. f.]
from the stony coral *Tubastraea* sp.
from the stony coral *Tubastrea faulkneri*
from the sub-Antarctic soft deep-water (200 m) coral *Alcyonium paessleri*
from the submerged cultures of the basidiomycete *Cheimonophyllum candidissimum* TA 8644
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from the submerged cultures of the basidiomycete *Cheimonophyllum candidissimum* TA 8650
from the subterranean fruit bodies and the cultured mycelium of the fungus *Malanogaster broomeianus*
from the surgeon fish (*Ctenochaetus striatus*) and from the marine dinoflagellate *Gambierdiscus toxicus*
from the Taiwanese gorgonian *Briareum excavatum*
from the Taiwanese gorgonian *Junceola juncea*
from the Taiwanese marine sponge *Parahigginsia* sp.
from the Taiwanese marine sponge *Polyfibrospongia australis*
from the tall herb *Curcuma longa* from India
from the tansy ragwort, *Senecio jacobea*
from the Tanzanian plant *Cyperus rotundus*
from the Tanzanian plant *Strychnos usambarensis*
from the Tanzanian plant *Uvaria* sp.
from the Tasmanian plant *Aristolelia peduncularis*
from the Tasmanian red alga *Plocamium cartilagineum*
from the terrestrial blue-green alga *Fischerella muscicola* and *F. major*
from the terrestrial blue-green alga *Hapalosiphon fontinalis*
from the terrestrial plant *Rumex patientia* from Turkey
from the Texan shrub coyotillo (*Karwinskia humboldtiana*)
from the Thai medicinal plant *Acanthus ebracteatus*
from the Thai plant *Phyllanthus amarus* (Euphorbiaceae)
from the Thai tree *Bauhinia malabarica*
from the Thailand mangroves spiny herb *Acanthus ilicifolius*
from the thin encrusting orange ascidian *Didemnum proliferum* from in southern Japan
from the thyroid gland of dogs
from the toadstool [mushroom] *Paxillus panuoides*
from the toxic mushroom *Russula subnigricans*
from the toxic mussel *Mytilus galloprovincialis*
from the traditional Chinese antimalarial herb *Artemisia annua* L.
from the tree *Abies balsamea* (Pinaceae)
from the trunk bark of *Hernandia nymphaeifolia* (Hernandiaceae)
from the tunicate *Aplidium longithorax*
from the tunicate *Aplidium meridanum*
from the tunicate *Aplidium meridianum*

from the tunicate *Clavelina oblonga* (Brazil)
from the tunicate *Clavelina picta*
from the tunicate *Dendrodoa grossularia*
from the tunicate *Eudistoma* cf. *rigida* collected off Ie Island, Okinawa, Japan
from the tunicate *Lissoclinum bistratum*
from the tunicates *Didemnum* sp. and *Aplidium tabascum*
from the Turkish folk medicinal plant Turnagagasi, *Geranium pratense*
from the Turkish Mediterranean Sea *Laurencia obtusa*
from the Turkish plant *Galanthus ikariae*, and from *Narcissus tazetta*
from the Turkish plant *Galanthus nivalis cilicicus* (Amaryllidaceae)
from the Turkish plant *Galanthus plicatus* (Amaryllidaceae)
from the Vanuatu marine sponge *Xestospongia sapra*
from the Vanuatu sponge *Axinella* sp.
from the Venezuelan soil fungus *Emericella falconensis*
from the venomous cone snail *Conus imperialis*
from the venomous cone snail *Conus radiatus*
from the victoria oat blight organism *Cochliobolus victoriae*
from the Vietnamese red alga *Laurencia calliclada*
from the Vietnamese red alga *Laurencia pannosa*
from the west African 'soap tree' *Dracaena mannii* (Dracaceae)
from the West Indian sea whip *Pseudopterogorgia elisabethae*
from the West Sumatran sponge *Dysidea herbacea*
from the Western Australian marine ascidian *Aplidiopsis* sp.
from the Western Australian sponge *Phorbas* sp.
from the Western Pacific gorgonian *Briareum stechei*
from the white flesh of the North American toadstool *Lepiota americana*
from the white-rot fungus *Bjerkandera adusta*
from the white-rot fungus *Bjerkandera adusta*; also observed in *B. fumosa*, *Hypholoma enongatum*, and *Pholiota adiposa*
from the white-rot fungus *Bjerkandera* sp.
from the widely used traditional medicinal fungus *Poria cocos*
from the wood of *Excoecaria agallocha*
from the wood-rotting fungus *Mycena galopus*
from the Yap area sponge *Dysidea* sp.
from the Yap area sponge *Rhaphisia pallida*
from the zoanthids *Zoanthus numphaeus* and *Zoanthus* sp.
from *Theonella swinhoei*
from *Thesium minkwizianum*
from *Thymus vulgaris*
from *Tinospora malabarica* (Menispermaceae), a plant cultivated throughout Pakistan
from *Tolypothrix tjipanasensis*
from *Trichoderma harzianum*
from *Trichoderma* sp., from *Gliocladium virens*
from *Trichothecium roseum*
from tropical Indo-Pacific scleractinian corals of the family *Dendrophylliidae*
from tuber of the plant *Cyperus rotundus*
from tubers of *Bolbostemma paniculatum*, Franquet, a traditional Chinese medicine 'Tu-Bei-Mu'
from tubers of the plant *Cyperus rotundus*
from tubers of the plant *Stephania erecta*
from tubers of the plant *Stephania pierrei*
from tubers of the plant *Stephania pierrei*, and from *Ocotea laucoxydon* (Lauraceae)
from twigs and thorns of *Castela polyandra*
from two mixed samples of *Lyngbya majuscula* and *Schizothrix* sp. (Taveuni Is., Fiji)
from two strains of the dinoflagellate *Protoceratium* cf. *reticulatum* (Sanriku, Iwate, Japan)
from *Uncaria rhynchophylla* (Rubiaceae)
from various Australian fungi of *Dermocybe* sp. and *Cortinarius* sp.
from *Verbena* sp. (*Lippia citriodora* Kunth)
from *Verbesina caracasana* (Asteraceae)
from *Viola prionantha*
from volcanoes
from water hemlock
from white mustard, *Sinapis alba*
from wood of the plant *Beilschmiedia madan*
from wood of the plant *Psychotria camponutans*
from wood-rotting fungus *Hypholoma elongatum*
from *Xerula longipes* and *X. melanotricha*
from yeasts

from *Yersinia* sp.
 from *Zanthoxylum schinifolium*
 from *Zygosporium mansonii*
 from the plant *Calophyllum caldonicum*
 fruit bodies of the basidiomycete *Ganoderma pfeifferi* (= *Ganoderma cupreolaccatum* = *G. soniese*)
 in marine animals
 in marine blue-green alga *Nostoc* sp.
 lignand
 main component of the female-produced sex pheromone of the coffee leaf miner, *Leucoptera coffeella*, an economically important pest of coffee trees in Brazil
 major component of the male-produced pheromone of the cotton boll weevil, *Anthonomus grandis*
 male-produced aggregation pheromone of the granary weevil, *Sitophilus granarius*
 male-produced aggregation pheromone of the rice weevil, *Sitophilus oryzae*, and of the maize weevil, *Sitophilus zeamais*
 male-produced aggregation pheromone of the sugarcane weevil, *Sphenophorus levis*
 male-produced sex pheromone of the green stink bug, *Nezara viridula*
 metabolite of garlic, *Allium sativum*
 minor component of the rectal glandular extract and volatile emission of males of the fruit fly, *Bactrocera cacuminatus*
 minor pheromone component of the common wasp, *Paravespula vulgaris*
 natural organohalogen compound, from *Streptomyces* sp.
 pheromone component of the male butterfly, *Lycorea ceres ceres*
 pheromone component of the turnip moth, *Agrotis segetum*
 pheromone for the male tick *Amblyomma americanum*
 pheromone of female diamondback moth (*Plutella xylostella*)
 pheromone of oriental fruit moth (*Grapholita molesta*), used to control the Koa seed worm and Macadamia nut borer
 pheromone of pink bollworm moth (*Pectinophora gossypiella*)
 pheromone of pink bollworm moth (*Pectinophora gossypiella*) on cotton
 pheromone of several species of the subterranean termite, *Heterotermes tenuis*, is a pest of great importance for the Brazilian economy as it causes serious damages in commercial plantations of *Eucalyptus* spp. and sugarcane
 pheromone of the bollworm moth
 pheromone of the codling moth (*Cydia pomonella*) on fruit and nuts, used to control the hickory shuckworm
 pheromone of the diamondback moth (*Plutella xylostella*) and component of the sex pheromone of the fall armyworm, *Spodoptera frugiperda*, an important economic pest of maize and other grass crops in North, Central, and parts of South America
 pheromone of the Douglas fir tussock moth (*Orgyia pseudotsugata*, McDunnough)
 pheromone of the eastern pine shoot borer
 pheromone of the European bark beetle (Dutch elm disease vector)
 pheromone of the European bark beetle *Hylastes opacus*
 pheromone of the European grapevine moth (*Lobesia botrana*)
 pheromone of the female diamondback moth (*Plutella xylostella*)
 pheromone of the female mosquito (*Culex* sp.)
 pheromone of the German organism *Blattella germanica*
 pheromone of the grape berry moth (*Endopiza vitana* Clemens)
 pheromone of the highly toxic, female caterpillar, *Lonomia obliqua*, and component of the sex pheromone of the fall armyworm, *Spodoptera frugiperda*, an important economic pest of maize and other grass crops in North, Central, and parts of South America
 pheromone of the Mediterranean fruitfly; natural organohalogen compound
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 pheromone of the omnivorous leafroller (*Platynota stultana*); pheromone of the female Light Brown Apple Moth (*Epiphyas postvittana*), used to control the Sparganothis fruitworm
 pheromone of the peach twig borer
 pheromone of the peach twig borer (*Anarsia lineatella*)
 pheromone of the sea lamprey *Petromyzon marinus*
 pheromone of the silkworm moth *Bombyx mori*
 pheromone of the western poplar clearwing moth (*Paranthrene robiniae*)
 pheromone of tomato pinworm (*Keiferia lycopersicella*)
 pheromone produced by the moth *Cretonotos transiens*
 produced by males of the beetles *Dendroctonus* spp., which infest pine trees found in the northern hemisphere, frequently causing the death of their host
 pungent constituent of the fruit bodies of the fungus *Chalciporus piperatus*
 sex pheromone emitted by female western corn rootworms, *Diabrotica virgifera virgifera*
 sex pheromone of the Japanese beetle, *Popillia japonica*
 sex pheromone of the leaf roller moth, *Bonagota cranaodes*
 sex pheromone of the longhorn beetle, *Migdolus fryanus*, an economically important pest of sugarcane in South America
 sex pheromone of the male ant species, *Calomyrmex* sp.
 sex pheromone of the moth *Grapholita dimorpha* Komai (Lepidoptera: Tortricidae), the cabbage armyworm *Mamestra brassicae* (Lepidoptera: Noctuidae), *Ostrinia orientalis*, and others
 sex pheromone produced by female cigarette beetle, *Lasioderma serricornis*
 sex pheromone produced by female house fly, *Musca domestica*

territorial marker from the beaver *Castor canadensis*

territorial marker from the musk deer

the acetate or propionate are the main sex pheromone components of the pine sawfly, *Neodiprion sertifer*, is a widespread and economically important forest insect in North America, Japan, and Europe

the central and west African shrub *Cryptolepis sanguinolenta*

the Graviola (Brazilian pawpaw) plant, *Annona muricata*, and related species

the marine ascidian, *Pseudodistoma* sp., collected in the Tsitsikamma Marine Reserve, South Africa

toxin of the highly venomous South American snake *Crotalus durissus terrificus*