

- Sindambiwe J. B., 269
Singh R. P., 105
Singh S., 31
Sinha-Bagchi A., 981
Sinha S. C., 981
Sinha S. K., 105
Sjödén K., 439
Skaltsa H., 1113
Smith P. J., 23
Soby S., 759
Song Kyung-Sik, 213
Sosa V. E., 499
Sotoma G., 665
Srinivas K. V. N. S., 985
Steck A., 1201
Steglich W., 795
Stevens J. F., 503, 1319
Stewart D., 43
Steynberg P., 1209
Sticher O., 643, 1191
Stone B. A., 1507
Stumpf D. K., 519
Styer E. H., 187
Su Wen-Chiung, 255
Suga T., 745
Sugimura Y., 1517
Sumatra M., 923
Suzuki M., 749, 1101
Suzuki S., 349
Suzuki T., 1309
Suzuki Y., 1485
Swinny E., 1209
Syah Y. M., 859
- Tada M., 815
Takagi S., 625
Takahashi E., 629
Takahashi H., 787
Takahashi K., 93
Takahashi Y., 1101
Takaishi K., 289
Takaoka S., 575, 1129
Takechi M., 121, 125
Takeda Y., 1351
Takei A., 1517
Takenaka H., 1301
Takenaka Y., 1341
Takeuchi Y., 461
Takushi A., 1351
Tan R. X., 111
Tanahashi T., 651, 1341
Tanaka H., 1129
Tanaka O., 1169
Tanaka R., 1163
Tanaka Toshiyuki, 545
Tanaka Y., 121, 125, 1501
Taneja S. C., 947, 1097
Tangpakdee J., 1501
Taniguchi K., 749, 1275
Tani K., 665
Taton M., 423
Tatsuzawa F., 635, 1607, 1613
Teng Che-Ming, 525
Terenzi H. F., 71
Terrero D., 229
Tezuka Y., 283
Thakur N. K., 599
Theilmann D., 1259
Thomas H., 377
Tillequin F., 323
Timmermann B. N., 519, 1123
Tip-pyang S., 903
Titlyanova T. V., 1535
- Tobita T., 787
Todorova M. N., 553
Toki K., 301, 1599
Tommasi N. De, 1357
Topcu G., 1143
Tori M., 977
Torre M. C. de la, 247, 571
Torres F., 753
Toshima H., 93
Towers G. H. N., 31
Toyota M., 207, 575, 833, 1347
Tramontano W. A., 85
Trendafilova A. B., 553
Tripathi M., 661
Truszcwska D., 1093
Tsai Ian-Lih, 525
Tsankova E. T., 553
Tschan G. M., 643
Tsuji J., 1047
Tucker J. C., 945, 1625
Turan Y., 1491
- Uchiyama T., 1309
Ueda K., 1301
Ueno A., 1411
Ueno T., 1473
Ulubelen A., 957, 1143
Ulyatt M. J., 617
Unelius C. R., 1477
Uno C., 121, 125
Uramoto M., 213
Uribe E., 373
Uriburu M. L., 499
Urones J. G., 1155
Usui S., 923
Usui T., 1013
- Vallès-Xirau J., 837
Valls R., 1367
Valterová I., 1477
VanEtten H., 759
Vecchiola A., 675
Veerachato G., 903
Venkaiah B., 713
Vercauteren J., 1329
Verpoorte R., 969, 1451
Vila R., 203
Vinciguerra V., 537
Vlietinck A. J., 269
Vurro M., 1035
- Waghorn G., 617
Wahab N., 23
Waight E. S., 1437
Walker-Simmons M. K., 1251
Wall M. E., 945, 1625
Wang Beng-Wern, 1361
Wang Bing Hui, 55
Wang Han-Qing, 871
Wang Meei-Ling, 1433
Wani M. C., 945, 1625
Wasa T., 1013
Watanabe Y., 207
Waterman P. G., 565, 735, 867, 951
Weavers R. T., 903
Weigt F., 1119
Weilacher T., 1073
Weintraub S. T., 89
Wen Dong-Xu, 657
Wendel T., 1445
Weselake R. I., 353
Wessels P. L., 1547

- Whitaker B. D., 187
 Wieruszeki J. M., 989
 Wijewardene C. S., 333
 Wilkins A. L., 327
 Win K. W., 1613
 Witsuwannakul R., 1501
 Witt W., 365
 Wolfender J.-L., 111
 Wollenweber E., 1119
 Wong Wah-Hun, 313
 Wray V., 129, 1399
 Wright A. D., 643
 Wu Chia-Li, 1439
 Wu De-Peng, 263
 Wu Pei-Lin, 237, 1433
 Wu Ru-Rong, 293, 1215
 Wu Tian-Shung, 237, 1433
 Wyk B.-E. Van, 795, 1547
- Xiao Pei-Gen, 991
 Xiong Jin-Zhe, 1187
 Xu Rensheng, 1553
 Xu Xiu-Zhi, 975
 Xue Yun, 1287
- Yagi T., 1057
 Yahara S., 1187
 Yamada K., 671
 Yamagata Y., 625
 Yamaki M., 625
 Yamamura S., 671
 Yamanaka M., 183
 Yamasaki K., 317, 1169
 Yamasaki Y., 703
 Yang Chong-Ren, 871, 1287, 1419
 Yang Genjin, 1553
- Yang Shu-Wei, 1389
 Yao M., 1351
 Yao Xin-Sheng, 283
 Yen Ming-Hong, 293, 309
 Yenesew A., 951
 Yeoman M. M., 477
 Yilmaz F., 957
 Yokoi M., 635, 1607, 1613
 Yokoyama M., 977
 Yoo Ick-Dong, 213
 Yoshida H., 1057
 Yoshida M., 977
 Yoshii T., 815
 Youssef D., 1107
 Yu Jing-Guang, 991
- Zamir L. O., 803
 Zapp J., 611
 Zaynizadeh B., 589
 Zelitch I., 699
 Zhang Cheng-Zhong, 975
 Zhang D. M., 1411
 Zhang L. X., 111
 Zhao F., 903
 Zhao K., 225
 Zhao Ping, 1419
 Zhao Weimin, 1553
 Zhi-Da Min, 545
 Zhou Bing Nan, 1593
 Zhou J.-B., 739
 Zhou Jian-Bo, 117
 Zhou Z.-H., 803
 Zhu Ting-Ru, 1423
 Zinsmeister H. D., 1621
 Zonno M. C., 1035

- Carotenoids,
 conversion of, in *Narcissus* chromoplasts 729
 from *Bixa* 1201
- Caryophyllaceae 447, 989
- Casearia tremula*, clerodane diterpenes from 565
- Cassia abbreviata*, proguibourtinidins from 1209
- Catalase isoforms, distribution of in tobacco 699
- Catechin, coupling reactions between flavylum ions and 1583
- Celastraceae 549
- Celastrus hindsii*, sesquiterpene ester from 549
- Cell cycle inhibition, in legume root meristems, by sodium butyrate 85
- Centaurea nicaensis*, sesquiterpene lactones from 335
- C. scoparia*, circular dichroism of C-7, C-6 trans-fused guaianolides from 1107
- Chamaecyparis obtusa*, polysaccharides in primary cell walls of 461
- Chamaemelum nobile*, flavonoid glycoside from 643
- Chemotaxonomic studies,
 of acylglycerols, in *Lycogala* 791
 of alginate compositions, in New Zealand brown seaweeds 1315
 of alkaloids
 homoerythrina, in *Lagarostrobos* 801
 in Asian *Sedum* species 1319
 of aromatics, in liverworts 207
 of dihydroanthracenones, in *Gasteria* 795
 of essential oils, in *Sideritis* 203
 of flavonoids, in *Sedum* and *Sempervivum* 503
 of iridoids, in different *Physostegia virginiana* populations 489
 of naphthalene glycosides, in *Aloe* 1547
 of nitrile glucosides, leucine-derived, in Rosaceae 779
 of phospholipids, in brown algae 1535
 of polar lipids, in aquatic green macrophytes 483
 of sesquiterpene lactones,
 in *Bejaranoa* 1543
 in *Inula* 1539
 of sterols and triterpenoids, in *Anabaena* 1083
 of sucrose esters from surface lipids, in *Petunia* 787
 of terpenoids,
 in liverworts 207
 in *Viguiera tucumanensis* varieties 499
- Chenopodiaceae 65, 685, 1523
- Chitinolytic activities, of trees and associated fungi, inhibition of 77
- Chlorella emersonii*, progesterone biotransformation by 1527
- Chlorophyllase, role of in olive chlorophyll metabolism 691
- Chlorophyta 1527
- Chlorophytum comosum*, steroidal saponins from 1405
- Chromones, from *Eriosema* 1287
- Chrysophyta 1445
- Cicer arietinum*,
 effect of polyethylene-glycol on abscisic acid levels in 681
 methylenedioxy bridge formation in isoflavonoid phytoalexins of 457
- Cinnamomum micranthum*, steroids and triterpenoids of fungus parasitic on 1389
- Cistaceae 1155
- Clerodendron colebrookianum*, sterol glycoside from 279
- Cnidium silaifolium*, monoterpene and coumarin glucosides from 1337
- Coffea arabica*, new hypothesis for caffeine biosynthesis in 169
- Combretaceae 591
- Combretum nigricans*, pentacyclic triterpenes from 591
- Compositae 97, 217, 225, 297, 335, 499, 519, 553, 557, 595, 643, 837, 845, 1105, 1107, 1113, 1123, 1275, 1357, 1377, 1399, 1437, 1539, 1543, 1593
- Coniferae, distribution of lignanoids in 995
- Consolida armeniaca*, acylated delphinidin glycosides from 1599
- Convolvulaceae 301, 1607
- Coronafacic acid, jasmonic acid-like biological activities of 93
- Coronatine, jasmonic acid-like biological activities of 93
- Corydalis* 13-hydroxylation of tetrahydroberberine in 1511
- Costus speciosus*, conversion of furostanol glycosides by β -glucosidase in 725
- Coumarin glucosides, from *Cnidium* 1337
- Coumarins,
 from *Bupleurum* roots 1579
 from *Esenbeckia* 647
 from *Peucedanum* 1423
 4-hydroxy-5-methyl-, from *Diospyros* 931
 with antiplatelet aggregation activity, from *Peucedanum* 525
- p*-Coumaroyl glycerides, from *Juncus* 545
- Crassulaceae 503, 1319
- Crinum firmifolium*, alkaloids from 323
- Croton hovarum*, clerodane diterpenes from 561
- Cruciferae 23, 353, 1187, 1613
- Cryptocarya latifolia*, α -pyrone from 333
- Cryptomeria japonica*, diterpenoids from 255
- Cucurbita pepo*, stability of ascorbate oxidase from 349
- Cucurbitaceae 349, 1169, 1265
- Cucurbitane glycosides, from *Hemsleya* rhizomes 1169
- Cudrania tricuspidata*, cytotoxic *p*-hydroxybenzylidihydroflavonols from 213
- Cunninghamella echinulata*, hydroxylation of sodium grinde-late by 473
- Cupressaceae 243, 461, 995, 1329, 1361
- Cyanidin glycosides, acylated, from $\times$ *Laeliocattleya* flowers 635
- Cycloartane glycoside, sweet-tasting, from *Abrus* leaves 1381
- Cyclohexanes, oxygenated, from *Piper* 1097
- Cyclo-(L-tryptophyl-L-phenylalanyl), from *Penicillium* 665
- Cyclozonarone, from *Dictyopteris* 749
- Cynanchum taiwanianum* acetophenones from 293
- Cynomoriaceae 975
- Cynomorium songaricum*, fructosides from 975
- Cystoseira amentacea*, meroditerpenes from 1367
- Cytochalasins, from *Daldinia* 821
- Cytotoxic
 cycloartanes, from *Aglaia* 1325
 p-hydroxybenzylidihydroflavonols, from *Cudrania* 213
 phloroglucinol, from *Baeckea* 923
 xanthonenes, from *Garcinia* 815
- D**
- Daldinia*, cytochalasins from 821
- Daphne mezereum*, floral fragrance chemistry of 1477
- Datura innoxia*, tropane alkaloid biosynthesis in 767
- D. tatula*, withanolides from 981
- Daucus carota*,
 6-hydroxymellein-*O*-methyltransferase from 1023
 lipid composition of microsomes of 187
- Delphinium cardiopetalum*, diterpenoid alkaloids from 1235
- Desmodium canum*, antimicrobial isoflavanones from 537
- Dianthus caryophyllus*, antifungal 3-hydroxyacetophenone from 447
- Dictyopteris undulata*, sesquiterpene-substituted benzoquinone from 749
- Dihydroanthracenones, from *Gasteria* 795
- Dihydroflavonols, benzyl-, cytotoxic, from *Cudrania* 213
- Dihydrophenanthropyran, from *Pleione* 625
- Dionaea muscipula*, ellagic acids and naphthoquinones from 775
- Diospyros kaki*, 4-hydroxy-5-methylcoumarins from 931
- Diterpenoid
 glycosides, from *Xanthium* 1357
 production, by *Scoparia* cultured tissues 193
- Diterpenoids,
 abietane,

- antimicrobial, from *Plectranthus* 735
 rearranged,
 from *Plectranthus* 571
 from *Salvia* 1143
 cedrene isoprenologue, from *Eremophila* 859
 clerodane,
 from *Casearia* bark 565
 from *Croton* 561
 from *Scutellaria* 855
 neo-clerodane, from *Scutellaria* 247
 from *Baccharis* 1123
 from *Cryptomeria* leaves 255
 from *Euphorbia* 1149
 from *Guarea* 1159
 from *Halimium* 1155
 from *Juniperus* heartwood 1361
 from *Leucas* 1569
 ent-kaurane, from *Jungermannia* 1129
 mero-, from *Cystoseira* 1367
 phyllocladane, from *Plectranthus* 1563
 sporia- γ -lactone, from *Heteroscyphus* cultures 581
 Droseraceae 775
- E**
 Ebenaceae 931
 Ecdysteroid, from *Nierembergia* 1393
Egletes viscosa, biologically active flavonoids and terpenoids from 217
Eichhornia crassipes, intramolecular copigmentation of anthocyanins in 301
 Ellagic acids, from *Dionaea* cultures 775
Emiliania huxleyi, lipid composition during growth of 465
 Endopeptidase, activity of, in *Lolium* leaves 377
Enterolobium contortisiliquum, Kunitz-type trypsin inhibitor from 1017
 Enzymes,
 α amylase, from poplar leaves 365
 anthranilate synthase, from *Ailanthus* 395
 arginase, from *Phaseolus* cotyledons 373
 ascorbate oxidase, from *Cucurbita*, stability of 349
 aspartate kinase, from maize mutants 707
 catalase, distribution of isoforms of, in *Nicotiana* 699
 endopeptidases,
 ATP-dependent, Ti-like, from spinach chloroplast 65
 from *Lolium* leaves 377
 fatty acyl-coenzyme A synthetase, from *Pinus*, substrate specificity of 1465
 α -glucosidase, from millet seeds 703
 6-hydroxymellein-*O*-methyltransferase, from elicitor-treated carrot cells 1023
 pectin methylesterase, from *Orobancha* 403
 peroxidase, anionic, from tobacco 1029
 phenylalanine ammonia-lyase, from poplar 1259
 phosphatase,
 acid, from germinating *Vigna* seeds 1457
 alkaline, from *Neurospora* conidia 71
 phosphatidate, from *Brassica* 353
 phosphorylase, multiple forms of, from *Sorghum* leaves 713
 proteases, extracellular, from *Trametes* 385
 protein kinase, calcium-dependent, from rice leaves 1459
 strictosidine glucosidase, from *Tabernaemontana* cultures 1451
Epimedium brevicornum, flavonol from 991
Eremophila, cedrene isoprenologues from 859
Eriosema tuberosum, chromones from 1287
Erysimum cheiranthoides, cardenolides from 1187
 Erythroxylaceae 767, 941
Erythroxylum coca, tropane alkaloid biosynthesis in 767
E. leal costae, flavonoids and triterpene esters from 941
Eschscholtzia californica, isoflavones from 661
Esenbeckia, alkaloids and coumarins from 647
 Essential oil composition, in *Sideritis* 203
Eucalyptus, bioactive acylphloroglucinols from 7
E. pilularis, inhibition of chitinolytic activities in 77
Euphorbia chamaesyce, seco-triterpene-dienoic acid from 1163
E. portulacoides, diterpenes and phloracetophenones from 1149
 Euphorbiaceae 561, 851, 985, 1149, 1163, 1441, 1501
Exacum affine, acetophenone glycoside from 289
- F**
Fagonia arabica, triterpenoid saponins from 1175
 Fatty acid hydroperoxide lyase activity, developmental changes of, in *Marchantia* cell cultures 177
 Fatty acyl-CoA synthetase, from *Pinus*, substrate specificity of 1465
 Fenpropimorph, effect of on sterol composition in fenu-greek 423
 Flacourtiaceae 565, 867
 Flavan-3-ols, from *Stryphnodendron* 807
 Flavanonols, cytotoxic, from *Cudrania* 213
 Flavone
 O-diglycoside, from *Pteris* 337
 glycoside, acylated,
 from *Chamaemelum* 643
 from *Leucas* 1569
 C-glycoside, from *Gentiana* 309
 Flavonoid variation, in *Sedum* and *Sempervivum* 503
 Flavonoids,
 biologically active, from *Egletes* 217
 from *Allium* 531
 from *Erythroxylum*, 941
 prenyl-, from *Broussonetia* 1215
 Flavonol glycosides,
 acylated, from *Herniaria* 989
 oviposition-stimulant, from *Asclepias* 139
 Flavonol, from *Epimedium* 991
 Flavylum ions, condensation of with catechin 1583
Fomitopsis pinicola, antimicrobial steroids from 1041
Fragaria $\times$ *ananassa*, platelet activating factor and lyso-phosphatidylcholines from 89
 Fragrance, of *Daphne* flowers 1477
Fraxinus angustifolia, secoiridoid glucoside from 1557
 Fructosides, from *Cynomorium* 975
 Fumariaceae 1511
 Fungi 71, 77, 263, 327, 345, 385, 447, 473, 513, 665, 675, 759, 791, 821, 927, 1013, 1035, 1041, 1079, 1093, 1293, 1301, 1389, 1473
 Furanone glucoside derivatives, from *Juniperus* 1329
 Furostanol glycosides, in *Costus*, conversion of to spirostanol glucoside 725
 Fusaric acid derivatives, phytotoxic to *Striga*, from *Fusarium* 1035
Fusarium nygamai, phytotoxic methyl esters of fusaric acids from 1035
- G**
Garcinia hanburyi, xanthenes from 815
G. subelliptica, xanthenes from 629
Gasteria bicolor, dihydroanthracenones from 795
Geniostoma antherotrichum, benzoic acid glycoside from 1205
Gentiana, flavone *C*-glycoside and aromatic glucoside from 309
G. algida, secoiridoids and antifungal aromatic acids from 111
 Gentianaceae 111, 289, 309
Gibberella fujikuroi, decomposition of gibberellic acid from 675
 Gibberellic acid, decomposition of, in aqueous solutions 675
 α -Glucosidase, from millet seeds 703
 β -Glucosidase, in *Costus*, converting furostanol- to spirostanol glycosides 725
 Glycoalkaloid synthesis, in relation to sterol synthesis, in potato 155

- Gossypium hirsutum*, (+)- δ -cadinene synthase from 1047
Gracilariopsis lemaneiformis, microthecin biosynthesis in 151
Gramineae 23, 37, 93, 377, 703, 707, 713, 1251, 1459, 1473, 1485, 1507
Grindellate, hydroxylation of, by *Cunninghamella* 473
Guarea trichilioides, diterpenes from 1159
Guttiferae 629, 815
Gymnema sylvestre, triterpenoid saponins from 1181
- H**
Halimium viscosum, diterpenic diol from 1155
Haloragaceae 133
Helminthosporium victoriae, toxin from, inducing oat phytoalexins 1473
Hemsleya panacis-scandens, cucurbitane glycosides from 1169
Hepaticae 177, 207, 575, 581, 611, 833, 1129, 1347, 1439
terpenoids and aromatics from 207
Herniaria fontanesii, acylated flavonol glycoside from 989
Heteroscyphus coalitus, terpenoids from 575
H. planus, spiro- γ -lactone diterpenes from 581
Heterothalamus alienus, peroxides from 297
Hevea brasiliensis, initiation of rubber biosynthesis in 1501
Hispolon, from *Inonotus* 927
Homalium longifolium, D:A-friedo-oleanane triterpenes from 867
Hyacinthus orientalis, anthocyanin production by regenerated flowers of 1531
Hydrocarbons, lipoxygenase-mediated formation of in freshwater diatoms 1445
Hydroperoxysterols, antibacterial, from *Xanthosoma* 1191
3-Hydroxyacetophenone, antifungal, from carnations 447
6-Hydroxymellein-O-methyltransferase, from elicitor-treated carrot cells 1023
- I**
Ilex kudincha, triterpenes and triterpenoid glycosides from 871
I. rotunda, dimeric sinapaldehyde glucoside from 657
Indole-diterpenoid, from *Penicillium* 327
Inonotus hispidus, yellow pigment from 927
Insecticidal
constituents, from *Zingiber* and *Kaempferia* 129
properties, of fungal carpophores 1293
Inula salsoloides, sesquiterpene lactones from 1539
Iridaceae 947, 1219, 1281
Iridals, localization of, in *Iris* rhizomes 1281
Iridoid distribution, in *Physostegia* populations 489
Iridoids,
from *Avicennia*, revision of 489
from *Scrophularia* 489
Iris germanica, localization of iridals in 1281
I. japonica, highly-oxygenated isoflavones from 1219
I. kashmiriana, isoflavones from 947
Isoflavanones, antimicrobial, from *Desmodium* 537
Isoflavans, prenylated, from *Millettia* 1223
Isoflavones,
from *Eschscholtzia* 661
from *Iris* 947, 1219
from *Millettia* seed pods 951
from *Petalostemon* bark 945, 1625
Isoflavonoid phytoalexins, biosynthesis of in *Cicer* 457
- J**
Jasminum polyanthum, dimeric secoiridoid glucosides from 1341
Jatropha gossypifolia, lignan from 985
Juncaceae 545
Juncus effusus, p-coumaroyl glycerides from 545
Jungermannia exsertifolia, ent-kaurane diterpenoids from 1129
- Juniperus chinensis*, di- and sesquiterpenes from 1361
J. phoenicea, furanone glucoside derivatives from 1329
- K**
Kaempferia rotunda, insecticidal constituents of 129
Khellactones, from *Peucedanum* 525
Koelpinia linearis,
long-chain alkanolic acid esters of lupeol from 1437
sterol from 595
- L**
Labiales 203, 247, 489, 571, 589, 735, 855, 1057, 1085, 1143, 1309, 1563, 1569
Lactarius vellereus, monohydroxylactones from 1093
 $\times$ *Laeliocattleya*, acylated cyanidin glycosides from 635
Lagarostrobos colensoi, homoerythrina alkaloids from 801
Lauraceae 229, 333
Laurelia sempervirens, seco-bisbenzylisoquinoline alkaloid from 339
Laurencia pannosa, brominated C₁₅ nonterpenoid from 1101
Lectins, N-acetyl-D-galactosamine-specific, from *Phaeolepiota* 1013
Legume root meristems, cell cycle inhibition in by sodium butyrate 85
Leguminosae 85, 93, 163, 373, 415, 423, 457, 537, 617, 681, 759, 807, 919, 945, 951, 1017, 1209, 1223, 1287, 1381, 1457, 1491, 1573, 1625
Lemna minor,
biosynthesis of L-ascorbic acid and oxalic acids from D-glucosone in 145
solubilization of cell wall pectic polysaccharides from 719
L. paucicostata, inhibition of chloroplast protein phosphorylation by cAMP in 49
Lemnaceae 49, 145, 719
Lepidimoides, structure-activity relationship of 671
Lepidozia vitrea, eudesmane sesquiterpenoids from 833
Leucas neufliaseana, diterpenes and acylated flavone from 1569
Lignanoids, distribution of in Coniferae 995
Lignans,
from *Jatropha* stems 985
from *Magnolia* 287
macrocyclic, from *Pellia* 611
Lignin-like dehydrogenation products, cross-linking of synthetic proteins into 43
Ligusticum chuanxiong, phthalides from 233
Liliaceae 599, 1225, 1405, 1531
Lilium martagon, pyrroline glucoside ester and steroidal saponins from 1225
Limonoids,
from *Xylocarpus* 903
insect-antifeedant, from *Melia* 117, 739
Lipid composition,
during growth of *Emiliania* 465
of microsomes from heat-stressed carrot cultures, 187
Lipids,
from *Matricaria* cultured shoot primordia 1275
polar, distribution of in aquatic green macrophytes 483
Lipoperoxidation, measurement of in habituated sugarbeet cells 1523
Lipoxygenase
activity, developmental changes in, in *Marchantia* cultured cells 177
reactions, formation of odorous diatom compounds by initiation of 1445
Lithospermum erythrorhizon, inhibition of shikonin biosynthesis in 1065
Lobelia cardinalis, polyacetylene glucosides from hairy root cultures of 183
Lobeliaceae 183
Loganiaceae 1205
Lolium temulentum, endopeptidase activity in 377
Lotus corniculatus, proanthocyanidins from 617

- Lycogala epidendrum*, acylglycerols from 791
Lycopersicum esculentum, brassinosteroid metabolism in cell cultures of 197
 Lyso-phosphatidylcholines, from strawberry 89
- M**
Maesa lanceolata, triterpenoid saponins from 269
Magnolia biondii, neolignan and lignans from 287
 Magnoliaceae 287
 Majorenolide, structure revision of 229
 Malondialdehyde, and lipoperoxidation in habituated sugar-beet 1523
 Malvaceae 1047
Marchantia polymorpha, development changes in lipoxygenase activity in cultured cells of 177
Marsdenia tenacissima, polyoxypregnanes from 1385
Matricaria chamomilla, lipids from oil bodies in 1275
Matthiola incana, acylated pelargonidin glycosides from 1613
Medicago sativa, phytoalexin detoxification by fungal pathogens of 759
Megaceros flagellaris, phytyl esters and phaeophytins from 1373
Melia toosendan, limonoid antifeedants from 117, 739
 Meliaceae 117, 739, 903, 1159, 1325
Melilotus messanensis, triterpenoids from 1573
Mentha arvensis × *spicata*, xyloglucan in extracellular polysaccharides from 1309
 Meroditerpenes, from *Cystoseira* 1367
 7-Methyl-xanthine monophosphate, role of in caffeine biosynthesis 169
 Methylenedioxy bridge formation, in isoflavonoid phytoalexins in *Cicer* 457
 O-Methyltransferases, of hydroxycinnamic acids in wheat 1507
 Microthecin, biosynthesis of in *Gracilariopsis* 151
Mikania mendocina, sesquiterpene lactones from 845
Milletia dura, isoflavones from 951
M. racemosa, prenylated isoflavans from 1223
Millingtonia hortensis, glucosidal alkaloid from 317
Mimusops, triterpenoid saponins from 883, 887
 Monimiaceae 339
 Monohydroxylactones, from *Lactarius* 1093
 Monoterpene glycosides,
 from *Cnidium* 1337
 from *Paeonia* 237
 hydrocarbons, in *Pinus* tissues, enantiomeric compositions of 439
 Monoterpenoids,
 biotransformation of by *Penicillium* spores 1079
 from *Mussaenda* 1553
 Moraceae 213, 1215
Morinda citrifolia, effects on *Drosophila* of volatiles from 433
Murraya euchrestifolia, carbazole alkaloids from 1433
Musa acuminata, phenalenone phytoalexins from 753
 Musaceae 753
 Musci 1621
Mussaenda pubescens, monoterpenes from 1553
 Myoporaceae 859
Myriophyllum spicatum, algicidal hydrolysable polyphenols from 133
 Myrsinaceae 269
 Myrtaceae 7, 77, 923
- N**
 Naphthalene diglycoside, from *Aloe* 1547
 Naphthoquinones, from *Dionaea* cultures 775
Narcissus pseudonarcissus, conversion of violaxanthin in chromoplasts from 729
Neocallitropsis pancheri, sesquiterpenoids from 243
 Neolignan,
 from *Magnolia* 287
 from *Solanum fruits* 935
Nephrolepis brserata, drimanes from 1119
Neurospora crassa,
 conidial alkaline phosphatase from 71
 polynucleotide synthesized by strain of 345
Nicotiana sylvestris, anionic peroxidase from 1029
N. tabacum,
 distribution of catalase isoforms in 699
 mechanism of nicotine *N*-demethylation in 477
 Nicotine, *N*-demethylation of in tobacco cultures 477
Nierembergia hippomanica, ecdysteroid and pyrrolidine alkaloid from 1393
 Nitrile glucosides, leucine-derived, in Rosaceae 779
 Nitrogen recycling, in phenylpropanoid metabolism 31
 Norisoprenoids, from *Viburnum* 1333
- O**
Olea europaea, role of chlorophyllase in chlorophyll metabolism in 691
 Oleaceae 691, 1341, 1557
Onopordon myriacanthum, sesquiterpene lactones and elemenes from 1113
 Orchidaceae 625, 635
Orixia japonica, quinoline alkaloid from 1231
Ornithopus sativus, brassinosteroid metabolism in 163
 Orobanchaceae 403
Orobanche aegyptiaca, pectin methyltransferase from 403
Oryza sativa,
 antifungal 5-alkylresorcinol from 1485
 calcium-dependent protein kinase from 1459
 Oviposition-stimulant flavonol glycosides, from *Asclepias* 139
 Oxalic acid, biosynthesis of, in *Lemna* 145
- P**
Paeonia suffruticosa, monoterpene glycosides from 237
 Paeoniaceae 237
Panax notoginseng, dammarane saponins from 1419
Panicum miliaceum, α -glucosidase from 703
 Pannosallene, from *Laurencia* 1101
 Papaveraceae 661
Parthenium argentatum × *tomentosa*, antifungal eudesmanolides from 519
Passiflora edulis, glycosidic aroma precursors in 1497
 Passifloraceae 1497
 Pectin methyltransferase, from *Orobanche* 403
 Pedaliaceae 105
Pellia epiphylla, macrocyclic lignan from 611
Penicillium, cyclo-(L-tryptophyl-L-phenylalanyl) from 665
P. italicum, biotransformation of geraniol and nerol by 1079
P. paxilli, indole-diterpenoid from 327
 Pentapeptides, from *Aster* 225
 Peroxidase, anionic, from *tobacco* 1029
 Peroxides, from *Heterothalamus* 297
Persea indica, alkene- γ -lactones and avocadofurans from 229
Petalostemon purpureus, isoflavones from 945, 1625
Petunia hybrida, sucrose esters from surface lipids of 787
Peucedanum japonicum, coumarins and chromones from 525
P. praeruptorum, coumarins from 1423
Phaeolepiota aurea, *N*-acetyl-D-galactosamine-specific lectins from 1013
 Phaeophyceae, distribution of amino acid-containing phospholipid in 1535
 Phaeophyta 749, 1315, 1367, 1535
 Phaeophytins, from *Megaceros* 1373
Pharbitis nil, acylated peonidin glycosides from 1607
Phaseolus vulgaris, arginase from 373
 Phenolic glycosides, from *Aster* 1593
 Phenylalanine ammonia-lyase, from poplar, expression of in insect cell cultures 1259

- Phenylbutanoids, insecticidal, from *Zingiber* rhizomes 129
- 9-Phenylphenalenone phytoalexins, from *Musa* rhizomes 753
- Phenylpropanoid
 ester, from *Lilium* 1225
 metabolism, nitrogen recycling in 31
- Phloracetophenones, from *Euphorbia* 1149
- Phloroglucinols, cytotoxic, from *Baeckea* 923
- Phosphatase, alkaline, from *Neurospora* conidia 71
- Phosphatidate phosphatase, from *Brassica* seeds and cultures 353
- Phospholipid, amino acid-containing, distribution of in brown algae 1535
- Phthalides, from *Ligusticum* 233
- Phyllanthus nirurioides*, norsecurinine-type alkaloid from 1441
- Physostegia virginiana*, iridoid distribution in populations of 489
- Phytoalexins,
 induction of, in oats, by toxin from *Helminthosporium* 1473
 phenalenone, from *Musa* rhizomes 753
 pterocarpan, detoxification of by fungal pathogens of alfalfa 759
- Phytoanticipin, from carnations 447
- Phytoecdysone, from *Athyrium* roots 745
- Phytol esters, from *Megaceros* 1373
- Pinaceae 77, 439, 605, 995, 1465
- Pinus radiata*, substrate specificity of fatty acyl-CoA synthetase from 1465
- P. sylvestris*,
 enantiomeric compositions of monoterpene hydrocarbons in 439
 inhibition of chitinolytic activities in 77
- Piper cubeb*, oxygenated cyclohexanes from 1097
- Piperaceae 1097
- Plagioclila elegans*, secoaromadendrane from 1439
- Plagiomnium undulatum*, biflavonoids from 1621
- Plant growth regulator, from *Penicillium* 665
- Platelet activating factor, from strawberry 89
- Plectranthus ambiguus*, phyllocladanes from 1563
- P. elegans*, antimicrobial abietane diterpenoids from 735
- P. hereroensis*, rearranged abietane diterpenoid from 571
- Pleione bulbocodioides*, dihydrophenanthropyran from 625
- Podocarpaceae 801, 995
- Polianthes tuberosa*, extracellular polysaccharides from 1517
- Polyacetylene glucosides, from *Lobelia* hairy root cultures 183
- Polyethylene-glycol, effect of on abscisic acid levels in chickpea 681
- Polygonaceae 29
- Polynucleotide, synthesized by *Neurospora* strain 345
- Polyphenols, hydrolysable, algicidal, from *Myriophyllum* 133
- Polysaccharides,
 extracellular, from *Polianthes* callus cultures 1517
 in *Chamaecyparis* primary cell walls 461
 of kiwi fruit cell walls, synthesis of 407
 pectic, from *Lemna* and *Apium* cell walls, solubilization of 719
- Pontederiaceae 301
- Populus × canadensis* α -amylase from 365
- P. trichocarpa* $\times$ *deltoides*, phenylalanine ammonia-lyase from, expression of in insect cell cultures 1259
- Pregnanes, polyoxy-, from *Marsdenia* 1385
- Primula obconica*, primin and miconidin biosynthesis in 451
- Primulaceae 451
- Proanthocyanidin dimers, from *Cassia* 1209
- Proanthocyanidins,
 from *Lotus* 617
 from *Stryphnodendron* 807
- Progesterone, biotransformation of by *Chlorella* 1527
- Proteases,
 ATP-dependent, Ti-like, from spinach chloroplasts 65
 extracellular, from *Trametes* 385
- Protein kinase,
 calcium-dependent, from rice leaves 1459
 cAMP-dependent selective inhibition of by amphiphilic triterpenoids 55
- Protein phosphorylation, in *Lemna* chloroplasts, inhibition of by cAMP 49
- Pteridophyta 37, 337, 745, 1119
- Pteris cretica*, luteolin 7-O-sophoroside from 337
- Ptilostemon gnaphaloides*, triterpene epoxide and guaianolide from 1377
- α -Pyrones,
 5,6-dihydro-, from *Syncolostemon* 1085
 from *Cryptocarya* 333
- Pyrroline glucoside ester, from *Lilium* 1225
- R**
- Ranunculaceae 957, 1235, 1599
- Rauwolfia sellowii*, indole alkaloids from 969
- Rhodophyta 151, 1101
- Rosaceae 89, 779
 leucine-derived nitrile glucosides in 779
- Rubber biosynthesis, initiation of in *Hevea* 1501
- Rubiaceae 169, 433, 1553
- Rutaceae 647, 1231, 1433
- S**
- Salicaceae 365, 1259
- Salvia*, sesterterpenoid from 589
- S. limbata*, rearranged abietane diterpenes from 1143
- Santalaceae 829
- Santalum insulare*, santalane sesquiterpenes from 829
- Saponins,
 furostanol, from *Allium* bulbs 283
 steroidal,
 accumulation of in *Trigonella* pods 415
 from *Asparagus* 599
 from *Chlorophytum* 1405
 from *Lilium* 1225
 synthetic, structure-activity relationships of 121
 triterpenoid,
 dammarane, from *Panax* 1419
 from *Aralia* roots 1411
 from *Bellium* 1399
 from *Bupleurum* roots 895, 1579
 from *Fagonia* 1175
 from *Gymnema* 1181
 from *Maesa* 269
 from *Mimusops* 883, 887
- Sapotaceae 883, 887
- Scoparia dulcis*, diterpenoid production by cultured tissues of 193
- Scrophularia koelzii*, triterpene glycoside from 879
- S. ningpoensis*, iridoid from 489
- Scrophulariaceae 193, 489, 1035
- Scutellaria altissima*, clerodane diterpene from 855
- S. galericulata*, neo-clerodane diterpenoids from 247
- Secoiridoid glucosides,
 dimeric, from *Jasminum* 1341
 from *Fraxinus* 1557
- Secoiridoids, from *Gentiana* 111
- Sedum*,
 alkaloids from 1319
 flavonoid variation in 503
- Sempervivum*, flavonoid variation in 503
- Senna multiglandulosa*, bianthraquinones from 919
- Sesamum indicum*, effect of calcium chloride on heavy metal stress in 105
- Sesquillignans, from *Abies* wood 605
- Sesquiterpene cyclase, from bacteria-inoculated cotton foliar tissue 1047
- Sesquiterpene ester, from *Celastrus* 549

- Sesquiterpene glycosides,
 from *Alangium* leaves 1351
 from *Xanthium* 1357
- Sesquiterpene lactones,
 from *Bejaranoa* 1543
 from *Centaurea* 335
 from *Inula* 1539
 from *Mikania* 845
 from *Onopordon* 1113
 germacranolide, from *Artemisia* 1105
 guaianolides,
 from *Centaurea*, circular dichroism of 1107
 from *Ptilostemon* 1377
 rotundane, from *Artemisia* 553
- Sesquiterpenoids,
 biologically active, from *Botrytis* 513
 drimane, from *Nephrolepis* epicuticular wax 1119
 elemene, from *Onopordon* 1113
 eudesmane,
 antifungal from *Parthenium*, 519
 from *Lepidozia* 833
 from *Juniperus* heartwood 1361
 from *Neocallitropsis* 243
 guaiane, from *Valeriana* 977
 santalane, from *Santalum* 829
 secoaromadendrane, from *Plagioclila* 1439
 tricyclic, from *Artemisia* 837
- Sesterterpenoid, from *Salvia* 589
- Shikonin biosynthesis, in *Lithospermum* cultures, inhibition and regulation of 1065
- Sicyos australis*, trypsin inhibitors from 1265
- Sideritis*, essential oil composition of 203
- Silicas, biogenic, intramolecular macromolecules containing protein from 37
- Simaroubaceae 395
- Sinapaldehyde glucoside, dimeric, from *Ilex* 657
- Sodium butyrate, cell cycle inhibition by, in legume root meristems 85
- Solanaceae 31, 93, 155, 197, 477, 699, 767, 787, 879, 935, 981, 1029, 1393, 1629, 1633
- Solanum*, steroid alkaloids from 1629
- S. coccineum*, steroid alkaloid glycosides from 1633
- S. sisymbirifolium*, neolignan and sterols from 935
- S. tuberosum*, relation of sterols to glycoalkaloid synthesis in 155
- Sorghum vulgare*, multiple forms of starch phosphorylase from 713
- (-)-*ent*-Spathulenol, from liverworts, found to be an artefact 1347
- Spinacia oleracea*, ATP-dependent Ti-like protease from 65
- Starch phosphorylases, from *Sorghum* leaves 713
- Sterculiaceae 1073, 1197
- Steroidal glycosides, from *Tribulus* roots 907
- Steroids,
 antimicrobial, from *Fomitopsis* 1041
 from *Antrodia* 1389
- Sterol
 analysis, of *Venturia* strains 1301
 biosynthesis, in *Ajuga* hairy roots 1057
 composition, in fenugreek, effect of tridemorph and fenpropimorph on 423
 composition and synthesis, in potato, relation of to glycoalkaloid synthesis 155
 glycoside, from *Clerodendron* leaves 279
- Sterols,
 accumulation of, in *Trigonella* pods 415
 from *Anabaena* 1083
 from *Koelpinia* 595
 from *Solanum* fruits 935
- Stigmasterol glycoside, from *Ambroma* 1197
- Strictosidine glucosidase, from *Tabernaemontana* suspension cultures 1451
- Striga hermonthica*, methyl esters of fusaric acids phytotoxic to 1035
- Structure-activity relationships,
 of lepidimoid and analogues 671
 of synthetic cardiac glycosides 125
 of synthetic saponins 121
- Strypnodendron adstringens*, flavan-3-ols and prodelphinidins from 807
- Sucrose esters, from *Petunia*, surface lipids 787
- Syncolostemon parviflorus* 5,6-dihydro- α -pyrones from 1085
- T**
- Tabernaemontana divaricata*, strictosidine glucosidase from 1451
- Tannin-protein co-precipitation, stoichiometric studies of 1427
- Taxaceae 803, 863
- Taxanes,
 bioactive, from *Taxus*, semi-synthesis of 803
 from *Taxus* bark 863
- Taxodiaceae 255, 995
- Taxus brevifolia*, taxanes from 863
- T. canadensis*, bioactive taxane from 803
- Terpenoids,
 biologically active, from *Egletes* 217
 from *Acalypha* 851
 from *Heteroscyphus* 575
 from liverworts 207
 from *Viguiera* 499
- Tetrahydroberberine, 13-hydroxylation of, in *Corydalis* cultures 1511
- Tetrahydroisoquinoline-monoterpene glucosides, acylated, from *Alangium* 651
- Theaceae 1073
- Thymeliaceae 1477
- Tithonia diversifolia*, artemisinic acid analogue from 557
- Trametes trogii*, extracellular proteases from 385
- Tribulus cistoides*, steroidal glycosides from 907
- Tridemorph, effect of on sterol composition in fenugreek 423
- Trigonella foenum-graecum*,
 accumulation of sterols and steroidal saponins in 415
 effect of tridemorph and fenpropimorph on sterol composition in 423
- seco-Triterpene-dienoic acid, from *Euphorbia* 1163
- Triterpenoid
 epoxide, from *Ptilostemon* 1377
 esters, from *Erythroxylum* 941
 glycosides,
 from *Aster* 1593
 from *Ilex* leaves 871
 from *Scrophularia* 879
 sweet-tasting, from *Abrus* leaves 1381
- Triterpenoids,
 amphiphilic, selective inhibition of cAMP-dependent protein kinase by 55
 cytotoxic, from *Aglaia* 1325
 D:A-friedo-oleanane, from *Homalium* stems 867
 from *Anabaena* 1083
 from *Antrodia* 263, 1389
 from *Ilex* leaves 87
 from *Melilotus* 1573
 long-chain alkanolic acid, from *Koelpinia* 1437
 oleanane, from *Ambroma* 1197
 pentacyclic, from *Combretum* 591
- Triticum aestivum*, role of hydroxycinnamic acid O-methyltransferases in 1507
- Trypsin inhibitors,
 from *Sicyos* 1265
 Kunitz-type, from *Enterolobium* seeds 1017
- Tyrosine residues, enhancing cross-linking of proteins into lignin-like polymers 43

U

Umbelliferae 187, 233, 525, 719, 895, 1023, 1337, 1423, 1579

Umuravumbolide, structural isomer of, from *Cryptocarya* 333

V

Valeriana officinalis, guaiane sesquiterpene from 977

Valerianaceae 977

Venturia inaequalis, sterols in fungicide-resistant and -sensitive strains of 1301

Verbenaceae 279

Viburnum dilatatum, norisoprenoids from 1333

Victorin, from *Helminthosporium*, inducing stress compounds in oats 1473

Vigna sinensis, acid phosphatase I from 1457

Viguiera tucumanensis, terpenoids from 499

Volatiles, from *Morinda* fruits, effects of on *Drosophila* 433

W

Withanolides, from *Datura* 981

X

Xanthium spinosum, sesqui- and diterpene glycosides from 1357

Xanthones, cytotoxic, from *Garcinia* 629, 815

Xanthosoma robustum, antibacterial hydroperoxysterols from 1191

Xylocarpus granatum, limonoid from 903

Xyloglucan, *O*-acetylated, in extracellular polysaccharides from *Mentha* 1309

Z

Zea mays, aspartate kinase in mutants of 707

Zingiber cassumunar, insecticidal phenylbutanoids from 129

Zingiberaceae 129, 725

Zygophyllaceae 907, 1175