

CONTENTS

— Reviews —

Tanaka T., and Kaneo Y. : Tumor Targeting of Anticancer Drugs by the use of macromolecular as carriers.....	1
Akira Y. : Chemical and pharmacological studies on Aloe.	27

— Original articles —

Akinori A. : Ionic mechanisms involved in muscarinic regulation of neuronal and paraneuronal activity.....	46
Tamura Y., Sato Y., Akaike A., and Shiomi H. : Mechanisms of cholecy- stokinin-induced protection of cultured cortical neurons against N- methyl-D-aspartate receptor-mediated glutamate cytotoxicity.	48
Fujita K., Kubo T., and Ishizu T. : A complete set of 6-o-activated cyclooligosaccharidas having deformed cavities. 3 ^A , 6 ^A Anhydro-6 ^x - o-(2-naphthalenesulfonyl) - β -cyclodextrins.....	50
Fujita K., Ishizu T., Obe K., Minamiura N., and Yamamoto T. : Pre- paration and enzymatic structure determination of a complete set of 2 ^A , 6 ^x -Bis-o-(sulfonyl)- β -cyclodextrins.	51
Kawano S., Masujima T., Toyoda T., Shiwaku H., Ando M., Amemiya Y., Hinoue T., Yokoyama Y., Imai H., Tamai G., Kadoyama M., Hiraga T., Wada I., and Ikeda K. : Subtraction imaging Analysis by X-Ray Photoacoustic Spectroscopy.....	52
Funakoshi T., Shimada H., Kojima S., Shoji S., Kubota Y., Morita T., Tominaga N., and Ueki H. : Anticoagulant action of vanadate.....	54
Ueki H., Sera M., Tominaga N., Morita T., Sugino E., and Hibino S. : Inhibition of increasing effect of vanadate on glycogen content and lipoprotein lipase activity in fat pads by 5-N, N-hexamethylene amiloride....	56
Ueki H., Okuhama R., Sera M., Inoue T., Tominaga N., and Morita T. : Stimulatory effect of vanadate on 3', 5'-cyclic guanosine monophosphate- inhibited low Michaelis-Menten constant 3', 5'-cyclic adenosine mono- phosphate phosphodiesterase activity in isolated rat fat pads.....	58

Kaneo Y., Kano S., Tanaka T., Ogawa K., and Iguchi S. : The disposition and hepatic accumulation of glutathione-dextran conjugate.	60
Tanaka T., Shiramoto S., Kaneo Y., and Iguchi S. : Tumor accumulation of serum proteins as drug-carriers.	61
Kanke M., Koda K., Koda Y., and Katayama H. : Application of curdlan to controlled drug delivery. I. The preparation and evaluation of theophylline-containing curdlan tablets.	62
Kanke M., Koda K., Koda Y., Katayama H., and Nakayama A. : Preparation and in vitro drug release evaluation of curdlan tablets.	64
Katayama H., and Kanke M. : Drug release from directly compressed tablets containing zein.	66
Peter R. Byron, Frantisek Rypacek, Zhuang Sun, and Katayama H. : Poly-peptide absorption in the rat lung: Dose and charge dependence.	67
Matsuki Y., Hongu Y., Noda Y., Kiwada H., Sakurai H., and Goromaru T. : Effects of ascorbic acid on the metabolic fate and the free radical formation of iproniazid.	68
Hashimoto K., Maeda H., and Goromaru T. : Effects of benzylpiperazine derivatives on the neurotoxicity of 3,4-Methylenedioxymethamphetamine in rat brain.	70
Hashimoto K., and Goromaru T. : Reversal of acute effects of 3,4-Methylenedioxymethamphetamine (MDMA) in rat brain by 1-piperonylpiperazine.	71
Hashimoto K., and Goromaru T. : Study of 3,4-Methylenedioxymethamphetamine(MDMA)-induced neurotoxicity in rat brain using specific in vivo binding of [³ H] 6-nitroquipazine.	72
Hashimoto K., Maeda H., and Goromaru T., : Antagonism of 3,4-Methylenedioxymethamphetamine-induced neurotoxicity in rat brain 1-piperonylpiperazine.	74
Hashimoto K., and Goromaru T. : 4-Bromo-6-nitroquipazine: A new ligand for studying 5-hydroxytryptamine uptake sites in vivo.	75
Shibuya H., Murakami N., Shimada F., Yoshikawa M., and Kitagawa I. : Oxyagen-functionalization of C ₁₃ -angular methethyl group in pregnane steroid by means of intramolecular carbonyl-mediated anodic oxidation.	77

Shibuya H., Kawashima K., Narita N., Ikeda M., and Kitagawa I. : Syntheses of two pairs of enantiomeric C18-sphingosines and a palmitoyl analogue of Gaucher spleen glucocerebroside.	78
Shibuya H., Kawashima K., Narita N., and Kitagawa I. : Syntheses of a glycerophospholipid, C16-platelet activating factor and a palmitoyl analogue of M-5, an anti-inflammatory glyceroglycolipid.	80
Kitagawa I., Ru-song Zhang, Jong Dae Park, Nam In Baek, Takeda Y., Yoshikawa M., and Shibuya H. : Indonesian Medicinal Plants. I. Chemical structures of calotroposides A and B, two new oxypregnane-oligoglycosides from the root of <i>Calotropis gigantea</i> (Asclepiadaceae).	81
Kitagawa I., Ru-song Zhang, Hori K., Tsuchiya K., and Shibuya H. : Indonesian Medicinal Plants. II. Chemical structures of pongapinones A and B, two new phenylpropanoids from the bark of <i>Pongamia pinnata</i> (Papilionaceae).	82
Shibuya H., Takeda Y., Ru-song Zhang, Ru-Xin Tong, and Kitagawa I. : Indonesian Medicinal Plants. III. On the constituents of the bark of <i>Fagara Rhetza</i> (rutaceae). (1) : Alkaloids, phenylpropanoids, and acid amide.	83
Shibuya H., Takeda Y., Ru-song Zhang, Tanitame M., Yen-Li Tsai, and Kitagawa I. : Indonesian Medicinal Plants. IV. On the constituents of the bark of <i>Fagara rhetza</i> (Rutaceae). (2) : Lignan glycosides and two apioglucosides.	84
Shibuya H., Ru-song Zhang, Jong Dae Park, Nam In Baek, Takeda Y., Yoshikawa M., and Kitagawa I. : Indonesian Medicinal Plants. V. Chemical structures of calotroposides C, D, E, F, and G, five additional new oxypregnane-oligoglycosides from the root of <i>Calotropis gigantea</i> (Asclepiadaceae).	85
Kobayashi M., Hayashi K., Kawazoe K., and Kitagawa I. : Marine Natural Products. XXIX. Heterosigma-glycolipids I, II, III, and IV, four diacylglyceroglycolipids possessing ω 3-polyunsaturated fatty acid residues, from the raphidophycean dinoflagellate <i>Heterosigma akashiwo</i>	86
Kobayashi M., Kawazoe K., Katori T., and Kitagawa I. : Marine Natural Products. XXX. Two new 3-keto-4-methylene steroids, Theonellasterone and conicasterone, and a Diels-Alder type dimeric steroid bistheo-	

nellasterone, from the okinawan marine sponge <i>Theonella swinhoei</i>	88
Tsuruta Y., Moritani K., Date Y., and Kohashi K. : N-[4-(5,6-Dimethoxy-2-phthalimidyl)phenyl]maleimide as Precolumn Fluorescence Derivatization Reagent for Thiols.	90
Tsuruta Y., Tonogaito H., Takata Y., Date Y., Fujioka H., Sato K., and Kohashi K. : 4-(2-Phthalimidyl)benzoyl Cyanide as Fluorescent Labeling Reagent for Alcohols in High-Performance Liquid Chromatography.	91
Maruyama T., Mirian A Furuie, Hibino S., and Otagiri M. : Comparative study of interaction mode of diazepines with human serum albumin and α_1 -acid glycoprotein.	93
Kishida M., Choshi T., and Horimoto S. : Stability of CDDP/Lipiodol suspension.	95
Choshi T., Horimoto S., Ching Y.Wang, Nagase H., Ichikawa M., Sugino E., and Hibino S. : Synthesis of dibenzoylmethane derivatives and inhibition of mutagenicity in <i>salmonella typhymurium</i>	96
Hibino S., Sugino E., Kuwada T., Ogura N., Sato K., and Choshi T. : Synthesis of genotoxic Heterocyclic Amines Trp-P-1 and Trp-P-2.	98
Fukunaga M., Mifuchi L., Yanagihara Y., and Okuzako N. : Comparison of flanking regions of the 5S ribosomal ribonucleic acid genes in <i>Leptospira biflexa</i> and <i>Leptospira interrogans</i>	100
Fukunaga M., Okuzako N., Mifuchi I., Arimitsu Y., and Seki M. : Organization of the ribosomal RNA genes in <i>Treponema Phagedenis</i> and <i>Treponema pallidum</i>	101
Fukunaga M., and Sohnaka M. : Tandem repeat of the 23S and 5S ribosomal RNA genes in <i>Borrelia burgdorferi</i> , the etiological agent of lyme disease.	102
Fukunaga M., Yanagihara Y., and Sohnaka M. : The 23S/5S ribosomal RNA genes are separate from the 16S ribosomal RNA gene in <i>Borrelia burgdorferi</i> , the etiological agent of lyme disease.	103
Yanagihara Y. and Fukunaga M. : Borelia.	104
C.W.Penn, P.J.Bassford, D.Yelton, J.Dunn D.R.Nelson, Fukunaga M., and G.Stanek : Genetic apporoaches to cell biology and metabolism of Spirochetes.	105
Fukunaga M. : Organization of ribosomal RNA genes in spirochetes.	107

Yamato M., Hirota Y., Yoshida S., Tanaka S., Morita T., Sakai J., Hashigaki K., Hayatsu H., and Wataya Y. : Imbalance of deoxyribonucleoside triphosphates and DNA double-strand breaks in mouse mammary FM3A cells treated in vitro with an antineoplastic tropolone derivative.	108
Fukui N., Yoneyama Y., Hasegawa R., Haranaka R., Nakagawa S., and Morita T. : Effects of Sho-saiko-to on the experimentally induced regenerating liver Part I : Changes of activities of several enzymes related to hepatic injury.	110
Morita T., Motoyashiki T., Tsuruzono Y., Kanagawa A., Tominaga N. and Ueki H. : Rapid increase of inositol 1,4,5-trisphosphate content in isolated rat adipose tissue by vanadate.	112
Yagi A., Haraguchi H., Okamura N., and Hashimoto K. : Production of <i>l</i> -maackiain glucosides in callus tissue of <i>Sophora flavescens</i>	113
Haraguchi H., Abo T., Hashimoto K., and Yagi A. : Action-mode of antimicrobial altersolanol A in <i>pseudomonas aeruginosa</i>	114
Haraguchi H., Hashimoto K., and Yagi A. : Antioxidative substances in Leaves of <i>Polygonum hydropiper</i>	115
Yagi A. : Beneficial effect of Tan-shen, and extract from the root of <i>Salvia miltiorrhiza</i> , on post-hypoxic recovery of cardiac contractile force and its bio-productivity.	116
Okamura N., Sato M., Yagi A., Tanonaka K., and Takeo S. : An application of HPLC for identification of abietane-type pigments from <i>Salvia miltiorrhiza</i> and their effects on post-hypoxic cardiac contractile force in rats.	117
Yoshitomi H., Shizuku Y., Masuda Y., Itakura R., Kanke M., Okamoto S., Nishihata T., and Goto S. : Evaluation of enteric coated tablet sensitive to pancreatic lipase. I. In vitro disintegration test.	118

Published in 1990

Yoneyama Y., Fukui N., Hasegawa R., Haranaka R., Nakagawa S., Morita T. : Effects of sho-saiko-to on partial hepatectomy in rats.	120
--	-----