

References

Anothayanontha, C. Actions and mechanism of action of dioscorine on cardiovascular and respiratory system in experimental animal. Master's Thesis Chulalongkorn University, 1979.

Armstrong, C.M. Sodium channels and gating currents. Physiol. Rev. 61 (1981) : 644–683.

Bevan, C.W.L., and Hirst, J. A convulsant alkaloid of *Dioscorea dumetorum*. J. Chem. Soc. 25 (1958) : 103.

Bevan, C.W.L., Boardbent, I.L., and Hirst, J. Alkaloid of *Dioscorea dumetorum*. Nature 177 (1956) : 935.

Bhovadhi, P. Effects of dioscorine on the nervous system. Master's Thesis Chulalongkorn University, 1979.

Bisti, S., Iosif, G., and Strata, P. Suppression of inhibition in the cerebellar cortex by picrotoxin and bicuculline. Brain Res. 28 (1971) : 591–593.

Bloom, F.D., Hoffer, B.J., and Siggins, G.R. Norepinephrine mediated cerebellar synapses : a model system for

neuropsychopharmacology. Biol. Psychiat. 4 (1972) : 157–177.

Boardbent, I.L., and Schneiden, H. A comparison of some pharmacological properties of dioscorine and dioscine. Br. J. Pharmacol. 13 (1958) : 213–215.

Bormann, J. Electrophysiology of GABA_A and GABA_B receptor subtypes. Trends Neurosci. 11 (1988) : 112–116.

Budavari, S. The Merck Index. an encyclopedia of chemicals, drugs, and biologicals. 12th ed. USA : Merck & Co. Inc. Rahway, 1996.

Chansirisri, W., and Tejasen, P. The effects of Kloi (*Dioscorea* sp., *Dioscoreaceae*) on the central nervous system of mice. Chiang Mai Med. Bull. 16 (1977) : 57–64.

Chansirisri, W., Panthong, A., and Tejasen, P. Preliminary study the phamacological effect of Kloi (*Dioscorea* sp, *Dioscoreaceae*). Chiang Mai Med. Bull. 14 (1975) : 123–130.

- Chujo, T., Yamada, Y., and Yamamoto. Sensitivity of Purkinje cell dendrites to glutamic acid. Exp. Brain Res. 23 (1975) : 293–300.
- Curtis, D.R. Physical Techniques in Biological Research : Electrophysiological Method. Vol.5. New York : Academic Press, 1964.
- Curtis, D.R., Duggan, A.W., and Johnston, G.A.R. The specificity of strychnine as a glycine antagonist in mammalian spinal cord. Exp. Brain Res. 12 (1971) : 547–565.
- Dahlstrom, A., and Fuxes, K. Evidence for the existence of monoamine-containing neurones in the central nervous system : demonstration of monoamines in the cell bodies of brain stem neurones. Acta Physiol. Scand. 62 (1965) : supp. 232, 1–55.
- Eccles, J.C. The Understanding of the Brain. New York : McGraw-Hill, 1973.
- Frederickson, R.C.A., Neuss, M., Morzorati, S.L., and McBride, W.J. A comparison of the inhibitory effects of taurine and GABA on identified Purkinje cells and other neurones in the cerebellar cortex of the rat. Brain Res. 145 (1978) : 117–126.

Henry, T.A. The Plant Alkaloids. 4th ed. London : Churchill, 1949.

Hille, B. Ionic Channels of Excitable Membrane. 2nd ed. Sunderland, Mass : Sinauer, 1992.

Hokfelt, T., and Ljungdahl, A. Autoradiographic identification of cerebral and cerebellar cortical neurones accumulating labelled gamma-aminobutyric acid (3^{H} -GABA). Exp. Brain Res. 14 (1972) : 354–362.

Hokierti, P. Effect of dioscorine under action of pentobarbitone. Master 's Thesis Chulalongkorn University, 1980.

Ito, M. The cerebellum and neural control. New York : Raven Press, 1984

Kandel, E.R., Schwartz, J.H., and Jessell, T.M. Principles of Neural Science. 3rd ed. USA : Prentice Hall, 1991.

Kawamura, H., and Provinin, L. Depression of cerebellar Purkinje cells by microiontophoretic application of GABA and related amino acid. Brain Res. 24 (1970) : 293–304.

- Kelly, J.S., Simmonds, M.A., and Straughan, D.W. Microelectrode Techniques, in Method in Brain Research (Bradley, P.B. ed.) pp. 333–377. London : Willey and Sons, 1975.
- Ketusinh, O. On a toxic substance in kloi (*Dioscorea daemona*). J. Med. Ass. Thailand 25 (1942) : 195–219.
- Krnjevic, K. GABA and other transmitters in the cerebellum. Brain Res. Suppl. 6 (1982) : 532–551.
- Mayer, M.L. and Westbrook, G.L. Permeation and block of N-methyl-D-aspartic acid receptor channels by divalent cations in mouse cultured central neurones. J. Physiol. (Lond.) 394 (1987) : 501–527.
- Nadi, N.S., Kanter, D., McBride, W.J., and Aprison, M.H. Effects of 3-acetylpyridine on several putative neurotransmitter amino acids in the cerebellum and medulla of the rat. J. Neurochem. 28 (1977) : 661–662.
- Nadi, N.S., McBride, W.J., and Aprison, M.H. Distribution of several amino acids in regions of the cerebellum of the rat. J. Neurochem. 28 (1977) : 453–455.
- Nelson, A. Medical Botany. Edinburgh : E & S Livingstone, 1951.

- Nicoll, R.A. The coupling of neurotransmitter receptors to ion channels in the brain. Science 241 (1988) : 545–551.
- Nicoll, R.A., Malenka, R.C., and Kauer, J.A. Functional comparison of neurotransmitter receptor subtypes in mammalian central nervous system. Physiol. Rev. 70 (1990) : 513–565.
- North, R.A. Drug receptors and the inhibition of nerve cells. Br. J. Pharmacol. 98 (1989) : 13–28.
- Obata, K., Ito, M., Ochi, R., and Sato, N. Pharmacological properties of the post synaptic inhibition by Purkinje cell axons and the action of γ -aminobutyric acid in Deiter's neurones. Exp. Brain Res. 4 (1967) : 43–57.
- Okamoto, K., Quastel, D.M.J., and Quastel, J.H. Action of amino acids and convulsants on cerebellar spontaneous action potential in vitro : effects of deprivation of Cl⁻, K⁺ or Na⁺. Brain Res. 113 (1976) : 147–158.
- Olsen, R.W., Ban, M., Miller, T., and Johnston, G.A.R. Chemical instability of GABA antagonist bicuculline under physiological conditions. Brain Res. 98 (1975) : 383–387.

Olson, L., and Fuxes, K. On the projection from the locus coeruleus of the cat. J. Comp.Neurol. 73 (1971) : 405–430.

Otsuka, M., Obata, Y., Miyata, Y., and Tanaka, Y. Measurement of GABA in isolated nerve cells of cat central nervous system. J. Neurochem. 18 (1971) : 287–295.

Panthong, A. Personal Communication with poor Families in Chiang Mai and Lumpoon, 1973.

Panthong, A., and Chansirisri, W. On the problem of kloi as food. Chiang Mai Med. Bull 14 (1975) : 184–187.

Pavovat, R. A study of tropane derivatives from thorn apple leaves (Datura metel) and wild yam tubers (Dioscorea hispida). Master's Thesis Chulalongkorn University, 1973.

Pellegrino, L.J., Pellegrino, A.S., and Cushman, A.J. A stereotaxic atlas of the rat brain. New York and London : Plenum Press, 1979.

Perry, T.C., Currier, R.D., Hansen, S., and McLean, J. Aspartate–taurine imbalance in dominantly inherited olivoponto cerebellar atrophy. Neurology 27 (1977) : 257–261.

- Pinder, A.R. An alkaloid of *Dioscorine hispida*, Denstedt. Part II. J. Chem. Soc. 99 (1953) : 1825–1828.
- Rea, M.A., McBride, W.J., and Rohde, B.H. Regional and synapsosomal levels of amino acid neurotransmitters in the 3-acetylpyridine deafferent cat cerebellum. J. Neurochem. 34 (1980) : 1106–1108.
- Ribak, C.E., Vaughn, J.E., and Saito, K. Immunocytochemical localization of glutamic acid decarboxylase in neuronal somata following colchicine inhibition of axonal transport. Brain Res. 140 (1978) : 315–332.
- Ridtitid, W. A Pharmacological Study of Kloi (Dioscorea sp., Dioscoreaceae) on the Rat Phrenic Nerve Diaphragm Preparation. Master's Thesis Mahidol University, 1977.
- Ridtitid, W., and Apisariyakul, A. The Neuromuscular blocking effect of Kloi (Dioscorea sp., Dioscoreaceae). Chiang Mai Med. Bull 17 (1978) : 63–71.
- Roffer-Tarlov, S., and Sidman, R.L. Concentration of glutamic acid in cerebellar cortex and deep nuclei of normal mice and weaver,

staggers and nervous mutants. Brain Res. 142 (1978) : 269–283.

Roffer-Tarlov, S., Beart, P.M., O'Gorman, S., and Sidman, R.L. Neurochemical and morphological consequences of axon terminal degeneration in cerebellar deep nuclei of mice with inherited Purkinje cell degeneration. Brain Res. 168 (1979) : 75–95.

Rohde, B.H., Rea, M.A., Simon, J.R., and McBride, W.J. Effects of X-irradiation induced loss of cerebellar granule cells on the synaptosomal levels and the high affinity uptake of amino acids. J.Neurochem. 32 (1979) : 1431–1435.

Segal, M. The action of serotonin in the rat hippocampus. Adv. Exptl. Med. Biol. 133 (1981) : 375–390.

Sieghart, W. GABA_A receptors : ligand-gated Cl⁻ ion channels modulated by multiple drug-binding sites. Trends Pharmacol. Sci. 13 (1992) : 446–450.

Snyder, S.H. Drug and neurotransmitter receptors in the brain. Science 224 (1984) : 22–31.

Stecher, P.G. The Merck Index, an encyclopedia of chemicals and drugs.
8th ed. USA : Merck & Co. Inc. Rahway, 1968.

Szentagothai, J., and Arbib, M.A. Conceptual Model of Neuronal Organization. London : MIT press, 1974.

Taesotikul, T., and Kanjanapothi, D. A Pharmacological Study of the Action of Kloi (*Dioscorea* sp., *Dioscoreaceae*) on the Cardiovascular System. Chiang Mai Med. Bull 16 (1977) : 161–168.

Tantisira, B., Bhovadhi, P., Kunluan, P., and Tongroach P. Pharmacology of Diiscorine : 1 CNS Stimulant effect of dioscorine and its interaction with some depressants. Th. J. Pharm. Sci. 4 (1979) : 9–20.

Tantisira, B., Utrarachkij, J. Hokerti, P., Kunluan, P., and Tongroach, P. Analeptic Properties of Diiscorine. Th. J. Pharmacol. 6 (1984) : 71–84.

Tebecis, A.K. Transmitters and Identified Neurones in the Mammalian Central Nervous System. Bristol : Scientechnica, 1974.

Tejasen, P., and Thongtharb, C. The Influence of Kloi on Growth.
Chiang Mai Med. Bull 18 (1979) : 125–133.

Unwin, N. The structure of ion channels in membranes of excitable cells.
Neuron 3 (1989) : 665–676.

Watkins, J.C. and Evans, R.H. Excitatory amino acid transmitters. Annu. Rev. Pharmacol. Toxicol. 21 (1981) : 165–204.

Watt, J.M., and Breyer-Brandwijk, M.G. The Medical and Poisonous Plants of Southern and Eastern Africa. 2nd ed. Edinburgh and London : E & S Livingstone, 1962.

Young, A.B., Oster-Granite, M.L., Herndon, R.M., and Snyder, S.H. Glutamic acid : selective depletion by viral induced granule cell loss in hamster cerebellum. Brain Res. 73 (1974) : 1–13.

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