BIOACTIVITIES OF KOREAN MISTLETOE SPECIES OTHER THAN VISCUM ALBUM L. VAR. COLORATUM OHWI

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It is well known that Korean mistletoe (Viscum album L. var. coloratum Ohwi) has anticancer, hypotensive, antimicrobial and antivirus activities. The European mistletoe (V. album var. album) white fruit has been studied for its anticancer activity as it is widely used for the treatment of various malignant tumors and their supplement. Lectin and viscotoxin are the active anticancer ingredients. Homoflavoyadorinin-B was reported as an antioxidant component of the mistletoe, and oleanolic acid was also reported as an anticancer component. We have tested the changes of these components by their growth environments, such as the host plants, the distinct of growth, and the kinds of mistletoes using by HPLC analytical methods. There are five kinds of Mistletoe species in Korea. Most of them have above constituents evenly besides only one species. One of the Korean mistletoes (OKM) was very different constituent pattern. There were no main indicational bioactive ingredients, such as lectin, homoflavoyadorinin-B, and oleanolic acid was also smaller amount other than species. To investigate the bioactivities of this kind of mistletoe several bioassay were applied. OKM showed potent inhibitory activity against both types of monoamine oxidases and dopamine beta hydroxylase. But OKM did not inhibit NO production in the cell. We are isolating the bioactive compounds from this plant with MAO inhibitory activity as a guide assay.