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Marine Algae of order Chordariales are rich resources of bioactive metabolites. Methanolic extracts of the brown alga *Ishige Okamurae* exhibited potent antioxidative and butyrylcholinesterase(BChE) inhibitory effects. Bio-guided purification [solvent partition, ODS flash, silica flash, gel-filtration on Sephadex LH 20, ODS HPLC] of them gave a compound **1**. Its structure was elucidated by detailed analysis of spectroscopic data of **1** and comparison of literature data. A variety of bioassay for **1** is in progress.

[PD2-4] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Monoamine Oxidase Inhibitors from the Whole Plant of Cayratia japonica

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As a part of our ongoing research to discover novel monamine oxidase (MAO) inhibitors of plant origin, we found that a MeOH extract from the whole plant of Cayratia japonica (Vitaceae) strongly inhibited the MAO activity in mouse brain. The EtOAc-soluble fraction was, therefore, subjected to the bioactivity-guided fractionations to isolate the active compounds. The finally purified substances, apigenin (1), luteolin (2), and luteolin-7-O-glucoside (3), were identified by comparison of their spectral data. Of these, apigenin (1) and luteolin (2) showed significant MAO inhibitory activity. The isolation, structure elucidation, and MAO inhibitory activity of these isolates will be presented.

[PD2-5] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Phenolic glycosides from *Pyrola japonica*

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Six known phenolic glycosides, hyperin(**2**), androsin(**3**), homoarbutin(**4**), isohomoarbutin(**4a**), pirolatin(**7**) and monotropein(**6**), together with two new compounds, (**1**)[mp. 215~217 ℃, $C_{23}H_{32}O_{11}$] and (**5**)[mp. 121~123 ℃, $C_{18}H_{26}O_8$] were isolated from the BuOH fraction of *Pyrola japonica*(Pyrolaceae). The structures of the known compounds were determined by chemical and spectroscopic methods. The assignments of the ^1H- and ^{13}C-NMR spectra of these compounds were carried out by two-dimensional ^1H-^1H-COSY, NOESY and ^1H-^{13}C multiple-bond, multiple-quantum spectroscopic correlation techniques, and previous assignments for **4**, **4a** and **7** should be revised. The characterization of the two new compounds is now in progress.

[PD2-6] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]