특별강연 II-1

Natural Products from Mushrooms in China and their Biological Activities

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China is extraordinary rich in higher fungi. To date about 10,000 species of fungi have been reported from the vast territory of China. Among them, nearly 6000 species, belonging to about 1200 genera, are higher fungi (excluding lichens). Higher fungi in bio-resources belong to the very productive biologically sources which produce a large and diverse variety of secondary metabolites. We have been interested in the biologically active substances present in untapped and diverse source of higher fungi from China.

In order to search for naturally occurring bioactive metabolites from higher fungi we investigated the chemical constituents of more than 100 higher fungi in Southwest of China since last 10 years. More than 200 novel terpenoids, phenolics and nitrogen-containing compounds were isolated from basidiomycetes and ascomycetes (*Albatrellus confluens*, *Albatrellus dispansus*, *Boletus edulis*, *Boletopsis grisea*, *Boreostereum vibrans*, *Cortinarius tenuipes*, *Cortinarius vibratilis*, *Daldinia concentrica*, *Engleromyces gotzii*, *Hydnum repandum*, *Hygrophorus eburnesus*, *Lactarius deliciosus*, *Lactarius hirtipes*, *Lactarius mitissimus*, *Lactarius rufus*, *Polyporus ellisii*, *Russula cyanoxantha*, *Russula foetens*, *Russula lepida*, *Russula nigricans*, *Sarcodon leavagatum*, *Sarcodon scabrosus*, *Shiraia bambusicola*, *Suillus granulatus*, *Thelephora aurantiotincta*, *Thelephora ganbajun*, *Tremella aurantilba*, *Tricholomopsis rutilans*, *Tylopilus plumbeoviolaceus*, *Xylaria euglossa etc.*). Some of them showed very interesting pharmacological activities. The isolation, structural elucidation and biologically activity of the new compounds are discussed.

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