

Supercritical extraction and identification of essential oil from *Chamaecyparis Obtusa*

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Chamaecyparis obtusa (*C. obtusa*) is conifer in the cypress family Cupressaceae and is mainly distributed in Korea, Japan, and the north eastern part of China. The essential oils extracted from the leaves of *C. obtusa* have multiple biological activities such as antibacterial, antifungal, anti-mite, anti-termite and acaricidal. Supercritical carbon dioxide (SC-CO₂) extraction and hydrodistillation (HD) were used to determine the essential oil composition of the trunks and leaves of *C. obtusa*. The maximum measured extraction yield was 2.9%. The chemical composition of the essential oils was analyzed by GC-MS. The major components were α -terpinyl acetate (>10.9%), 1-muurolol (>13.2%) and elemol (>8.1%). Sesquiterpenoids formed the major class of compounds present.