

# Free radical-scavenging activity of Taiwanese native

## Plants

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## Abstract

The 70% aqueous acetone extracts of ten Taiwanese native plants were evaluated by various antioxidant assays, including 1, 1-diphenyl-2-picrylhydrazyl (DPPH), hydroxyl (.OH) radicals, and reducing power assay. In the present study, extracts of *Acer buerferianum* var. *formosanum*, *Cleyera japonica* var. *morii*, *Cyclobalanopsis stenophylla* var. *stenophylloides*, and *Machilus zuihoensis* exhibited stronger activity against DPPH radicals, and their IC50 values ranged from 5.4 to 8.3 microg/ml. The ten selected extracts effectively inhibited the formation of .OH generated in the Fenton reaction system. Among the extracts whose reducing power activities were determined, *A. buerferianum* var. *formosanum*, *C. japonica* var. *morii*, *C. stenophylla* var. *stenophylloides*, *Eriobotrya deflex*, and *M. zuihoensis* showed high activity. The results indicate the 70% aqueous acetone extracts of *A. buerferianum* var. *formosanum*, *C. japonica* var. *morii*, *C. stenophylla* var. *stenophylloides*, and *M. zuihoensis* with great potency in these assay systems and may be candidates for the development of natural antioxidants.