

Evaluation of the Antioxidant Activity of Some Medicinal Plants and Myanmar Traditional Medicine Products

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Abstract

The purposes of this research are to promote the local traditional medicine with the scientific experimental results by evaluation of the antioxidant activity of Myanmar natural plants and to produce the effective alternative medicine. Seven medicinal plants were selected to determine the antioxidant activity by 2,2-Diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging assay in this research. These plant samples were extracted with methanol solvent to evaluate the antioxidant activity. The results of antioxidant activity of *Garcinia magostana* L. (peel) 92.09%, *Glycyrrhiza glabra* L. (stem) 85.96% and *Curcuma longa* L. (rhizome) 80.05% in the highest concentration of 100 µg/ml were showed higher than the other plants. Pharmaceutical Research Department also collaborated with Royal Ruby Manufacturing Co., Ltd. to determine the antioxidant activity of its products and ingredient plants. The results were Shar-Zaung-Let-Patchet-say (49.55%), Shwe-Kyar-Maung rejuvenation tablet for men (64.16%), *Aloe vera* L. (leave) (54.56%) and *Tribulus alatus* Del. (whole plant) (57.39%) in the highest concentration of 100 µg/ml. This research work can benefit the role of traditional medicine by determination of the antioxidant activity from the plant extracts of some Myanmar medicinal plants.

Keywords: 2,2-Diphenyl-1-picrylhydrazyl, antioxidant activity, *Garcinia magostana* L., *Glycyrrhiza glabra* L., *Curcuma longa* L., *Aloe vera* L., *Tribulus alatus* Del.