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Evaluation of Antioxidant Activities of Rice Paddy Herb (Limnophila aromatica (Lam.) Merr.)

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Abstract : Free radicals are atoms or molecules with unpaired electrons. Many diseases are caused by free radicals. Normally, free radical formation is controlled naturally by various beneficial compounds known as antioxidants. Several analytical methods have been used for qualitative and quantitative determination of antioxidants, and each has its own specificity. This project aimed to evaluate antioxidant activity of ethanolic and aqueous extracts from the rice paddy herb (Limnophila aromatica (Lam.) Merr.) measured by DPPH and Hydroxyl radical scavenging method. The results showed that averaged antioxidant activity measured in ethanolic extract (µmol Ascorbic acid equivalent/g fresh mass) were 67.09± 4.99 and 15.55±4.82 as determined by DPPH and Hydroxyl radical scavenging activity assays, respectively. Averaged antioxidant activity measured in aqueous extract (µmol Ascorbic acid equivalent/g fresh mass) were 21.08±1.25 and 10.14±3.94 as determined by DPPH and Hydroxyl radical scavenging activity assays respectively.

Keywords : free radical, antioxidant, rice paddy herb, Limnophila aromatica (Lam.) Merr.
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