

Title Antioxidative properties and stability of ethanolic extracts of Holy basil and Galangal
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Abstract

The aims of this work were to assess the influence of concentration, heat treatment, and pH value on antioxidant activity of ethanolic extracts obtained from Holy basil (*Ocimum sanctum Linn*) and Galangal (*Alpinia galanga*). The antioxidative properties were evaluated. The ethanolic extracts of Holy basil and Galangal showed good heat stability (80 °C, 1 h). At neutral and acidic pH, Holy basil extracts had high antioxidative stability, whereas Galangal extracts showed higher antioxidative stability at neutral than at acidic pH ranges. Antioxidant activity of both extracts at neutral pH was higher than at acidic pH ranges. Holy basil and Galangal extracts exhibited strong superoxide anion scavenging activity, Fe²⁺ chelating activity, and reducing power in a concentration-dependent manner. Antioxidant activity of both extracts correlated well with reducing power. Furthermore, ethanolic extracts of Holy basil and Galangal acted as radical scavenger and also as lipoxygenase inhibitor.