

**ANTIOXIDANT ACTIVITY OF EDIBLE MUSHROOMS
(*Pleurotus* sp., *Volvariella volvaceae*, *Lentinus edodes*, *Auricularia auricula-judae*, and *Grifola frondosa*) WITH DPPH METHOD**

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Abstract

Currently edible mushrooms are commonly consumed by people in Indonesia, and have potential as health food and medicine. This study aims to reveal the potential for antioxidant activity in edible mushrooms which are widely sold in markets and supermarkets in the Greater Jakarta area (Jakarta – Bogor-Depok-Bekasi). Some of the edible mushrooms tested were oyster mushroom or hiratake (*Pleurotus* sp.), straw mushroom (*Volvariella volvaceae*), shitake mushroom (*Lentinus edodes*), red ear mushroom (*Auricularia auricula-judae*), and maitake mushroom (*Grifola frondosa*).

The method used in analysing the antioxidant activity was the DPPH radical absorption method. The antioxidant activity of this mushroom extract was expressed in the percentage of its inhibition against the DPPH radical.

The parameter used to show antioxidant activity is the Efficient Concentration (EC 50) or Inhibition Concentration (IC 50).

The IC 50 values for each of the edible mushroom extracts were 615258 ppm for straw mushrooms, 556337 ppm for maitake mushrooms, 519594 ppm for shitake mushrooms, 320863 ppm for oyster mushrooms, and 2330692 ppm for ear mushrooms. The result shown that oyster mushroom has the highest antioxidant activity.

Keywords: edible mushroom, antioxidant activity, DPPH, IC50