

### Characteristics of *Spirogyra varians* mutant with high antioxidant properties

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In this study, *Spirogyra varians* mutant with high antioxidant properties was developed by gamma irradiation mutagenesis. Mutant *S. varians* strain survived at the absorbed dose of 8 kGy gamma irradiation. Methanol extracts were prepared from *S. varians* wild-type and mutant plants, and their antioxidant activities and total phenolic content (TPC) were determined. Antioxidant parameters, including the 2-diphenyl-1-picrylhydrazyl radical-scavenging activity and ferric-reducing/antioxidant power, were higher in the mutant extract. Moreover, the TPC level was higher ( $P < 0.05$ ) in the mutant methanol extract.