

Brown seaweeds exhibit several health benefits in treating and managing wide array of ailments. In this study, the antidepressant-like effect of methanolic extracts from *Sargassum swartzii* (SS), *Stoechospermum marginatum* (SM), and *Nizamuddinina zanardinii* (NZ) was examined in forced swimming test (FST), in rats. Oral administration of SS, SM, and NZ extract (30–60 mg/kg) exhibited antidepressant-like activity in FST by reducing immobility time as compared to control group, without inducing significant change in ambulatory behavior in open field test. In order to evaluate the involvement of monoaminergic system, rats were pretreated with the inhibitor of brain serotonin stores *p*-chlorophenylalanin (PCPA), dopamine (SCH23390 and sulpiride), and adrenoceptor (prazosin and propranolol) antagonists. Rats receiving treatment for 28 days were decapitated and brains were analyzed for monoamine levels. It may be concluded that the extracts of SS, SM, and NZ produces antidepressant-like activity via modulation of brain monoaminergic system in a rat model.

Antidepressant-like activities of selected brown seaweeds via modulation of monoaminergic system.

