

CNS depressant activity of extracts from *Flaveria trinervia* Spring C. Mohr.

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Abstract

The methanolic and aqueous extracts of *Flaveria trinervia* were screened for CNS depressant activity by forced swim, actophotometer and rotarod methods using mice. Imipramine and chlorpromazine hydrochloride were used as the standard references. Forced swim test revealed that the animals treated with the extracts showed decrease in their immobility times, which was significant when compared with the control. Locomotor activity test by actophotometer revealed that among both the extracts, methanol extract showed more significant effect. Motor coordination test revealed that the methanol and aqueous extracts exhibited marked reduction in motor coordination in mice after an oral administration. But aqueous extracts showed significant effect. However, the standard treated group revealed a statistically significant decrease in the immobility time and motor coordination activity as compared with the control. *F. trinervia* extracts showed a significant depression pattern revealing their neuropharmacological effect.

Keywords: *Flaveria trinervia*, forced swim, actophotometer, rotarod, CNS depressant activity.

Introduction

CNS depression is considered as an affective disorder characterized by change in mood, lack of interest in the surroundings, apathy, loss of energy, psychomotor retardation, melancholia as well as profound feelings of gloominess, despair and suicidal ideation. The prevalence of CNS depression in general population is estimated to be around 5% and is recognized to be symptomatically, psychologically and biologically heterogeneous (Thase et al., 1995). This disorder was characterized by retardation of thinking and activity. In spite of the availability of CNS depressant and antidepressant drugs, depression or anxiety continue to be a major medical problem (Yu et al., 2002). At present 121 million people are estimated