

Abstract

Ocimum kilimandscharicum and *Ocimum kenyense* are two closely related species endemic to Kenya. They find wide application in a diverse array of medicinal applications, including pain relief. The present investigation was carried out to study their antinociceptive activity using the radiant tail-flick test in mice. At 100, 200, 400 and 800 (mg/kg Bwt) dosages, the ethanolic leaf extracts of both *O. kilimandscharicum* and *kenyense* exhibited statistically significant antinociceptive activities ($p < 0.01$), in a dose dependent manner. The experimental results obtained in this study therefore validate the traditional uses of these plant species as analgesics. Further, this study provides a springboard into future phytochemical and pharmacological studies of these plant species.