

CENTRAL EFFECTS OF A NEW SECOISOPIMARANE DITERPENOID FROM AERIAL PARTS OF *SALVIA CINNABARINA*

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The genus *Salvia*, Labiatae, is generally known for its multiple pharmacological effects including analgesic and antiinflammatory activities, antipyretic, antioxidant, hepatoprotective, hypoglycaemic, antiepileptic, antiulcerogenic, as well as tranquillizing activities (1). We have recently isolated a new secoisopimarane diterpenoid compound, 3,4-secoisopimar-4(18),7,15-triene-3-oic acid (SCB-58) from the aerial parts of *Salvia cinnabarina* (2). This compound showed antispasmodic activity in the isolated intestine (2). Furthermore, the diterpenoid inhibits mouse intestinal motility *in vivo* (3) and inhibits rat urinary bladder contractility *in vitro* (4). This work examines some effects of SCB-58 on the central nervous system (CNS) in mouse. Putative anxiolytic and antidepressant properties of *Salvia cinnabarina* were studied in the elevated plus-maze test (EPM) and in the forced swimming test (FST), respectively. Furthermore, the diterpenoid was administered after the pre-treatment with pentobarbital and its effects on sedative activity was monitored. The compound SCB-58 was also tested for its effects on spontaneous motor activity (total motility and locomotion) and several models of nociception have been used to examine the potential analgesic effects. The diterpenoid of *Salvia cinnabarina* (10 mg/kg) administered intraperitoneally (i.p.), increased the percentage of time spent in the open arms of the elevated plus-maze (EPM) in a similar way to diazepam (1 mg/kg, i.p.). Furthermore, the pre-treatment with SCB-58 (10 mg/kg, i.p.) showed an increase of pentobarbital-induced sedation (50 mg/kg, i.p.) as observed after diazepam (2 mg/kg, i.p.) administration. Spontaneous locomotor activity count measured in 60 min of the test was significantly decreased in animals pretreated with SCB-58 (100 mg/kg, i.p.). In treated mouse, SCB-58 (50 mg/kg, i.p.) caused inhibition of formalin-induced pain but not significantly effects were observed in hot-plate and tail-flick tests. It is concluded that the diterpenoid of *Salvia cinnabarina* has CNS depressant properties, manifested as antinociception, sedation and anxiolytic effects which deserve further investigations.

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