

Short communication

Studies on the sedative activity of crude extract of root bark of *Rauvolfia canescens* on rats

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1. Introduction

For centuries, *Rauvolfia serpentina* Benth. (Apocynaceae) roots have been used as hypnotics and sedatives in neuropsychiatric disorders, in anxiety states and in epilepsy (Srivasta, 1978). A closely related species *R. canescens* L. is found in Sri Lanka, especially in the Benotota area. This plant is reported to contain chemical constituents which are closely related to those found in *R. serpentina* (Krishnamurthi, 1969). As such it may be possible that *R. canescens* roots be used as a substitute for *R. serpentina* in the treatment of the above mentioned diseases. This study was carried out to investigate the possible sedative effects of *R. canescens* using rat hole board technique (File and Wordwill, 1975.)

2. Methodology

2.1. Plant material

Fresh plants of *R. canescens* L. (Apocynaceae)

were collected and authenticated by the late Professor S. Balasubramaniam of the University of Peradeniya, Sri Lanka. A voucher herbarium specimen has been deposited at the Royal Botanical gardens, Peradeniya.

2.2. Extraction of plant material

Peeled out, shade dried, and powdered *R. canescens* root bark was exhausted by agitation with ammoniated methanol (1:10) and filtered. The marc was again extracted by shaking with methanolic NaOH (1%) for 2 h and filtered. The filtrates were treated separately. The ammoniated MeOH was evaporated to dryness under reduced pressure and at 50°C and the resultant residue was dissolved in 1 M HCl and extracted with petether to remove fatty materials. The aqueous layer was extracted with chloroform in acidic and basic media to obtain the bases. The methanolic NaOH solution was similarly extracted. The CHCl₃ layers were evaporated to dryness under reduced pressure and the crude alkaloid extract was obtained. The yield was 6.34%.

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