Alkaloids of Siparuna griseo-flavescens

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Literature describing the indigenous medicine of Central and northern South America contains numerous references to various plant species of the genus Siparuna (Monimiaceae) that have been used in the therapy of snakebite, fever, headache, rheumatism, and various infections (1). To our knowledge, the literature is devoid of references to the constituents of Siparuna griseo-flavescens Perk. However, the following species are sources of various benzylisoguinoline-derived alkaloids as noted (2, 3): S. gilgiana (liriodenine, oxonantenine), S. dresslerana (flavinantine, O-methylflavinantine), S. guianensis (cassamedine, liriodenine), S. nicaraquensis (liriodenine), S. pauciflora (nantenine, noroliveroline, N-methyllaurotetanine), and S. tonduziana (laurotetanine, N-methyllaurotetanine, norantenine, nantenine, anonaine, asimilobine, liriodenine, oxoantenine, reticuline).

Siparuna griseo-flavescens Perk. was collected on December 5, 1990 at Reserva Forestal de San Ramon, Alajuela, and identified by (voucher deposited) Dr. Jorge Gomez Laurito, Herbarium of the National Museum, San Jose. The air-dried, ground stems (1.2 kg) were extracted with EtOH and the resulting extract fractionated via accepted methods (2) to afford a basic fraction. Repeated gradient column chromatography (CHCl₃-MeOH mixtures) (silica gel) and preparative TLC (C_6H_6 -Me₂CO-NH₄OH mixtures) (silica gel) afforded the aporphine alkaloids (+)-isocorydine (2 mg) (3), (+)-nantenine (10 mg) (4), (+)-N-methylaurotetanine (5 mg) (4), and (+)-asimilobine (45 mg) (4). The alkaloids were characterized by direct comparison (UV, IR, 1 H-NMR, EIMS, m.p., optical activity) with authentic samples and/or published data (3, 4).

References

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Erratum

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The following text should be added: Curcumin inhibited the calcium/calcium ionophore-stimulated formation of LTB, with an EC $_{50}$ of $27\times10^{-6}\,M.$