

290. *RAUVOLFIA TETRAPHYLLA* L. (APOCYNACEAE) — Pinque-Pinque

Roots are pulverized and made into tranquilizing infusions.⁵⁴ Deserpidine (canascine, recanescine) is extracted commercially from the roots for use as hypotensive and tranquilizer.⁴² Bark is inserted in teeth to cause them to disintegrate. Purple juice used for dye and ink in Central America.¹⁷

Reported to be parasiticial, avicidal, and poisonous, pinque-pinque is a folk remedy for skin ailments, syphilis, and wounds.³² Mexicans use the roots for erysipelas, gingivitis, sore throat, stomatitis, ulcers, and wounds. West Indians use the bark for skin ailments and syphilis. Yucatanese use the latex as an antiedemic, cathartic, collyrium (or for granulated eyelids), diuretic, emetic, and expectorant. Central Americans use the plant for fever, malaria, skin ailments, and snakebite.^{22.32.42} Crushed roots used for mange in dogs.¹⁷

The alkaloid extract, especially yohimbine, is hypotensive, but only in cases of high blood pressure.³³ Rauvolscine, the alkaloid that is the major element in the entire plant, is hypotensive but not sedative.⁴² Guatemalan investigators have isolated two alkaloids, chachupine A and B, from the plant.²² *Hager's Handbook* lists alstonine, ajmalicine, ajmaline, aricine, corynanthine, deserpidine, isoreserpiline, renoxydine, reserpiline, reserpine, reserpinine, sarpagine, serpentine, yohimbine, alpha- and beta-yohimbine, pseudoyohimbine, canembrine (raunescine), 19-methyl- (or allo-) yohimbine, raujemidine, isoreserpinine ($C_{22}H_{26}N_2O_4$), isoraunescine ($C_{31}H_{36}N_2O_8$), pseudoreserpine ($C_{32}H_{38}N_2O_9$). Morton gives formulas for many of these compounds.¹⁷ The Conservation Foundation Letter²⁷⁷ says "only 10% of the pharmaceutical compounds obtained from plants can be commercially synthesized at competitive costs." Reserpine, for example, can be commercially prepared from natural sources for as little as \$1/g but synthesizing it costs twice as much.

Toxicity — Listed as a narcotic tranquilizer,⁵⁴ fruits toxic, sap may cause dermatitis. Said to have caused fatalities;¹¹ causes stomatalgia, pharyngeal constrictions, intense thirst, enteritis, often violent, acute burning sensation, bloody diarrhea, nausea, vomiting, convulsions, cold hands and feet, death in extreme cases.¹⁷