

STERCULIACEAE

EXTRACTIVES FROM THE FLOWERS OF *CHIRANTHODENDRON*
*PENTADACTYLON**

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Key Word Index—*Chiranthodendron pentadactylon*; Sterculiaceae; octacosane; docosanol-1; sitosterol.

Plant. *Chiranthodendron pentadactylon*, 'macpaxochitl' from nahuatl, *macpal*, hand and *xochitl*, flower, is a huge and rare tree. The genus has only the specie *pentadactylon*. Its flowers, 10–15 cm long, have the appearance of a hand or the claw of a bird. *Source.* Oaxaca City. *Uses.* As a medicine on heart ailments.¹ *Previous work.* Identification of an anthocyanidin derivative of apigenin.²

Compounds isolated. The dried flowers were extracted successively with light petroleum and EtOH. From the light petroleum extracts by silica gel chromatography, *octacosene*, $C_{28}H_{58}$ confirmed by m.m.p. *docosanol-1*, $C_{22}H_{46}O$, m.p. 68–70° m.m.p. IR and *acetate sitosterol*, $C_{29}H_{50}O$ m.p. 137–139° [α] -38° ($CHCl_3$) confirmed by IR, NMR, mixed and co-TLC with authentic material. *Acetate*, m.p. 128–129° [α] -40° ($CHCl_3$). The ethanolic extract gave negative alkaloid and cardiac glycosides tests.³ No anthocyanins could be detected, but there is a very insoluble red flavonoid. The ethanolic extracts were very toxic on mice.

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¹ M. MARTÍNEZ, *Las Plantas Medicinales de México* 4a Ediciones Botas, p. 421, México (1959).

² E. SODI PALLARES and H. MARTÍNEZ GARZA, *Archiv. Biochem.* **21**, 377 (1949).

³ X. A. DOMÍNGUEZ, *Ciencia (Mex.)* **21**, 127 (1962).