

## SHORT COMMUNICATION

# PROTOPINE FROM *MECONELLA OREGANA* VAR. *CALIFORNICA*\*

F. R. STERMITZ and R. M. COOMES

Department of Chemistry, Colorado State University, Fort Collins, Colorado 80521

(Received 30 August 1968)

THE TITLE plant is a minute, extremely rare poppy species whose few known locations are restricted to the West Coast of the United States. We were able to obtain a few plants† amounting to 29 g of dried above-ground material. This was extracted with cold butanol–benzene, followed by 1 M H<sub>2</sub>SO<sub>4</sub> extraction of the butanol–benzene, and subsequent basification of the acid layer and extraction with CHCl<sub>3</sub> at successive pH values of 2, 12, and 9. Only the pH 12 fraction (about 15 mg of crude material) showed the presence of alkaloids. One major alkaloid was separated by preparative TLC and was shown to be identical with authentic protopine by mass spectrum and *R<sub>f</sub>* value (on silica gel G, iodoplatinic acid visualization agent) in three solvent systems. One very minor additional alkaloid of high polarity (low *R<sub>f</sub>*) was noted but could not be reextracted in sufficient quantity for meaningful study. Because of the apparent unexceptional major alkaloid content of this variety and the undesirability of any depletion of the native populations, no further work will be attempted.

\* Part IX in the series “Alkaloids of the Papaveraceae”. For Part VIII, see F. R. STERMITZ, R. M. COOMES and D. R. HARRIS, *Tetrahedron Letters* 3915 (1968). The present work was supported by grant GM 15424 from the United States Public Health Service.

† A voucher specimen is deposited at the Intermountain Herbarium, Utah State University, Logan, Utah, under accession number 102130.