EXPERIMENTAL

The plant material was collected along the road Muqdishu-Afgooye at the end of May 1981. It was identified by Prof. F. Raimondo, Institute of Botany, University of Palermo; voucher specimens are deposited there in the herbarium.

Air-dried stems and flowers (500 g) were ground and extracted with cold acetone for 5 d. The solvent was removed under reduced pressure, then the residue was chromatographed over silica gel deactivated with 15% water. Elution with petroleum ether and increasing percentages of ethyl acetate yielded a large amount of a mixture of sterols and triterpenes, which was methylated with ethereal CH_2N_2. Careful rechromatography allowed the separation of pure methyl oleanolate (3 g), identified by conventional methods (mp, ms, nmr, glc, hplc, compared with an authentic sample).

Further chromatography of other fractions separated a mixture of sterols from residual methyl oleanolate. This mixture was examined by glc on a Varian 1440 instrument, FID, ⅛″×6′ column packed with 3% OV-1, temperature 260°, carrier gas N_2 20 ml/min. The fraction contains campesterol (>5%, Rt 4′55″), stigmasterol (~60%, Rt 5′15″), sitosterol (~35%, Rt 5′50″) and a fourth unidentified product (traces, Rt 6′35″). The ms of the fraction was identical with the spectrum of an artificial mixture of the three identified sterols.

From the more polar fractions, methyl maslinate and methyl 3-epi-maslinate, isolated by repeated chromatography over silica gel and then by hplc on a Waters instrument with RI, Micro-Porasil 7.8 mm×30 cm, eluent cyclohexane-ethyl acetate (1:1), 1 ml/min flow rate: methyl maslinate Rt 23′, methyl 3-epi-maslinate Rt 28′20″. Both products were identified by mp, nmr, ms, and hplc, comparable to authentic specimens. Traces of two other unidentified triterpenes were observed in these fractions.

LITERATURE CITED

1. G. Cufodontis, Enumeratio Pl. A. Spermatophyta, *Bull. du Jardin Botanique de l'Etat* (Bruxelles) **33** (3), 848 (1963).
2. C.C. Xaasan, C.X. Ciilmi, M.X. Faarax, S. Pasasannanti, F. Piozzi, and M. Paternostro, *Phytochemistry* **19**, 2229 (1980).

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CHEMICAL INVESTIGATION OF FRUITS OF *POINSETTIA PULCHERRIMA*

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On chemical analysis, the fresh fruits of *Poinsettia pulcherrima* Willd (1) were found to contain the compounds listed below. The fruits were collected from the plants growing wild in the fields adjoining Roorkee. Although some work is reported on it (2-5), no work so far has been done on its fruits. Full details of the isolation and identification of the compounds are available on request to the senior author.

Compound	Identified by	Reference
Epigermanicyl acetate	mp, ir, ^{1}H-nmr, [α]D	(4)
Germanicyl acetate	mp, [α]D	(3-5)
Germanicol	mp, [α]D, by preparing acetyl derivative	(3-5)
Octacosanol	mp, ir, ^{1}H-nmr, mmp, co-tlc	(4)
β-sitosterol	mp, mmp, co-tlc, [α]D, ir, by preparing acetyl derivative	(3-5)

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LITERATURE CITED

1. "The Wealth of India, Raw Materials," Vol. III, CSIR, New Delhi, 1952, p. 230.
2. W. Frans, *Lipids*, **12(9)**, 707 (1977).
3. H.N. Khastgir and B.P. Pradhan, *J. Ind. Chem. Soc.*, **44(2)**, 159 (1967).
4. S.B. Mahato, N.P. Sahu, B.C. Pal, and R.N. Chakravarti, *J. Ind. Chem. Soc.*, **54(4)**, 388-90 (1977).
5. K. Saad, N. Nawal, A.S. Nabil, and S.E. Ahmad, *Acta Pharm. Jugosl*, **30(2)**, 107 (1980).

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CHEMICAL EXAMINATION OF *ASTERACANTHA LONGIFOLIA*

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Chemical examination of *Asteracantha longifolia* Nees (Acanthaceae) has led to the isolation of three compounds mentioned below. Plant material, growing wild, was collected from Saharanpur, Uttar Pradesh, India. Full details of the isolation and identification of the compounds are available on request to the senior author.

It was observed that betulin is absent in the aerial parts, whereas stigmasterol is absent in the roots of the plant.

Compound	Identified by	References
Lupeol	mp, ms, ir, uv, and by preparing its acetyl and benzoyl derivatives	(1-6)
Betulin	mp, ^{1}H-nmr, ms, ir, uv, and by preparing its acetyl and benzoyl derivatives	(5,6)
Stigmasterol	mp, ir, uv, and by preparing its acetyl derivative	(4)

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LITERATURE CITED

1. R.N. Chopra, S.L. Nayer, and I.C. Chopra, "Glossary of Indian Medicinal Plants," CSIR, New Delhi, 1956, p. 29.
2. A. Chatterjee and S.K. Srimany, *J. Indian Chem. Soc.*, **34**, 882 (1957).
3. T.R. Govindachari, K. Nagaranjan, and B.R. Pai, *J. Sci. Ind. Research*, **16B**, 72 (1957).
4. C. Quasim and N.L. Dutta, *J. Indian Chem. Soc.*, **44**, 82 (1967).
5. H. Budzikiewicz, J.M. Wilson, and C. Djerassi, *J. Am. Chem. Soc.*, **85**, 3688 (1963).
6. M. Shamma, R.E. Glick, and R.O. Mumma, *J. Org. Chem.*, **27**, 4512 (1962).

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