RESEARCH IN PROGRESS

Arul Anadar College, Karumathur – 626 514, Madurai Dt., S. India. The Department of Chemistry of the College reports phytochemical studies in Coldenia procumbens. L. Fam. Boraginaceae.

The plant belonging to the family Boraginaceae, is a prostrate hairy herb, occurring mostly as a weed in wastelands and riverbanks.^{1,2} In the Indian system of Medicine, the fresh leaves of this plant are ground and applied to rheumatic swellings. The dried plant, with equal parts of fenugreek seeds is used for causing suppuration of boils³. A Survey of the past literature reveals that no chemical investigations on this plant have so far been reported and hence this present work.

Coldenia procumbens, collected in the month of June, was air dried, powdered and the aerial portion was extracted successively with hot benzene and alcohol4.

The benzene extract on concentration gave a green sticky mass and this was subjected to column chromatography on silica gel. Eluting the column with solvents of increasing polarity, a compound was isolated in the benzene – chloroform (19:1) fraction. The compound (mpt 138 – 140°C) answered the Liebermann – Burchard colour test. It underwent acetylation to give an actylderivative of mpt 126°C. On comparison of the properties of this compound and its acetate with those reported in the literature, it was found to be Beta- sitosterol. This was further confirmed by Co-TLC.

The alcoholic extract on concentration gave a sticky mass. Preliminary investigations on this indicated the presence of saponin, as it was found to give copious lather with water, haemolyse red blood cells, and responded to colour reactions characteristic of saponins. Further work is being carried out to isolate the saponin in pure form, elucidate its structure and biochemical activities.

REFERENCES

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