

## E2-17: New coumarins from *Aegle marmelos* root bark

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*Aegle marmelos* (Sinh. Beli, Family Rutaceae), a medium size tree, is mainly grown in Sri Lanka for fruit. Many parts of the plant are used in Ayurvedic medicine.

The terpene lupeol, coumarins and furoquinoline alkaloids previously isolated from its root bark extract, showed insecticidal activity. The coumarins isolated included marmin, auraptene, epoxyauraptene, imperatorin and a chlorocoumarin which was shown to be an artefact, 7-[2-(2,2,6-trimethyl-3-chloropyran-6-yl)-ethyl]oxycoumarin.

The presence of 2 new 7-geranyloxycoumarins in the root bark extract is reported. One of them containing a carbonyl group in the geranyloxy side chain was shown to be 7-(3,7-dimethyloct-2-ene-6-onyl)oxycoumarin. The second could be an artefact formed by the involvement of methanol in the rupture of the epoxy ring in epoxyauraptene during extraction with methanol. It was shown to have the 7-(7-methoxy-3,7-dimethyloct-2-en-6-onyl)oxycoumarin structure. The structures of the coumarins were determined from spectral data and confirmed by using chemical methods.

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