

The exact role of the UV light is not known. It might involve the general activation of the reaction components, or the prevention of dimerization of the nitroso compound III to an inactive compound.⁸

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shown to contain simple phenethylamine derivatives.

The base fraction consisted of *N*-methylphenethylamine (I) and *N,N*-dimethylphenethylamine (II). The mixture was treated with ketene and then analyzed by combined gas chromatography-mass spectrometry. The retention times of II and of the acetyl derivative of I, as well as their mass spectra, were indistinguishable from those of authentic samples.

The main part of the alkaloid fraction consisted of a quaternary compound, a phenethyl trimethylammonium salt. This was isolated as the iodide (III), which was indistinguishable from an authentic sample (m.p., IR, UV, NMR).

10 kg of the fresh plant material afforded 1 g of III, 50 mg of I and 5 mg of II. Choline (0.3 g) was also obtained.

This seems to be the first time *N,N*-dimethylphenethylamine (II) and phenethyl trimethylammonium ion have been found in Nature.

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Studies on Orchidaceae Alkaloids

XV.* Phenethylamines from *Eria jarensis* Ames

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In most species of the genus *Eria* hitherto tested, a low alkaloid content has been detected.^{2,3} The first species investigated further, *Eria jarensis* Ames,** has been

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** Collected in the Philippines by Miss Mary Fermin.