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Alkaloids of Mackinlaya Species (Family Araliaceae)

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Two alkaloids from the leaves of Mackinlaya subulata Philipson and Mackinlaya macrosciadia (F. Meull.) F. Muell., the first isolated from plants of the family Araliaceae, belong to a new class. We have identified these as 6,7,8,9-tetrahydro-pyrido[2,1-b]quinazolin-11-one (I) and 6,7,8,9-tetrahydro-11H-pyrido[2,1-b]quinazoline (II), which have previously been obtained by synthetic methods. 1,2,3

Biosynthetically these alkaloids are related to vasicine,^{4,5} which is considered to be derived from anthranilic acid and ornithine. We suggest that,

by analogy, the *Mackinlaya* alkaloids (I) and (II) may be synthesised in the plant from anthranilic acid and lysine.

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¹ E. Späth and N. Platzer, Ber., 1935, 68, 2221.

² G. G. Munoz and R. Madronero, Chem. Ber., 1962, 95, 2182.

³ T. Stephen and H. Stephen, J. Chem. Soc., 1956, 4694.

⁴ J. R. Price, Fortschr. Chem. org. Naturstoffe, 1956, 13, 332.

⁵ K. Mothes and H. R. Schutte, Angew. Chem., 1963, 75, 357.