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IDENTITY OF A PIGMENT ISOLATED FROM *MYCOBLASTUS SANGUINARIUS* WITH RHODOCLADONIC ACID*

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A comparison between the red pigment isolated from *Mycoblastus sanguinarius* (L.) Norm.,[1] and rhodocladonic acid, isolated from different *Cladonia* species,[2,3] shows them to be identical.

They give the same wine-red colour with KOH, conc. H_2SO_4 and Mg acetate in MeOH. Both pigments give a trimethyl ether ($M^+ = 360$ *m/e*) when treated with CH_2N_2 and a triacetate ($M^+ = 444$ *m/e*) with Ac_2O—pyridine.

The identical MS of these compounds have a molecular peak at *m/e* 318 (100%) ($C_{15}H_{10}O_8$, high resolution MS), and prominent peaks at *m/e* 272 (40%) 257 (32%), 247 (28%) and 191 (71%) (70 eV, 160°). Their IR spectra are identical, with absorption at ν_{max} (KBr) 3385 (*m*), 3300 (*m*), 3120 (*w*), 1635 (*s*), 1610 (*s*), 1540 (*m*), 1450 (*m*), 1305 (*s*) and 1290 (*s*) cm^{-1}.

The NMR spectra (in $CDCl_3$), recorded with a time averaging computer, showed one singlet at δ 7·45 corresponding to an aromatic proton, and two singlets at δ 4·22 and 2·55, which were integrated as either 2 and 3 or 3 and 3 protons respectively.

Both the *Myoblastus*-pigment[1] and rhodocladonic acid[2] have been thought to be anthraquinones. In 1969 Baker and Bullock suggested rhodocladonic acid to be a naphtoquinone derivative,[3] but the structure of this interesting lichen compound is still uncertain.

* Part XXXV in the series "Chemical Studies on Lichens". For part XXXIV see BOHMAN-LINDGREN, G. (1972) *Tetrahedron* **28**, 4631.

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