

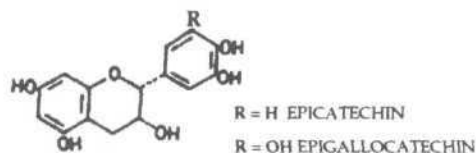
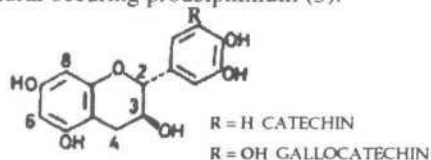
P G08 PROANTHOCYANIDINS FROM *RIBES NIGRUM* LEAVES

1 ISOLATION AND STRUCTURE DETERMINATION

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The black-currant leaves are traditionally used in Europe for the treatment of rheumatic disease. We have observed that their antiinflammatory activity (rat-paw carrageenan) was mainly due to proanthocyanidins (1). It is interesting to point out that the prodelphinidins are relatively rarely found in the Nature compared to their procyanidins counterparts. In the case of *Ribes Nigrum* the ratio prodelphinidin:procyanidin is about 9:1 (2). Up to now, we have isolated by chromatography (MPLC on RP8 and Sephadex LH20) four flavan-3-ols: galocatechin (GC), epigallocatechin (EPG), catechin (C) and epicatechin (EC), four dimers: GC(4 α -8)GC, GC(4 α -8)EGC, GC(4 α -8)C, GC(4 α -6)GC, and two trimers: GC(4 α -8)GC(4 α -8)GC and an other (Mr 898) of which structure is not fully elucidated. The structure determination of these compounds has been based on spectral data (FAB mass, IR, ^1H and ^{13}C NMR) and correlation with known prodelphinidins. These proanthocyanidin oligomers are found for the first time in *Ribes Nigrum*. Trimeric galocatechin is a new natural occurring prodelphinidin (3).



References

- (1) M.Tits, L.Angenot, J.Damas, Y.Dierckxsens, P.Poukens - 39th Annual Congress on Medicinal Plant Research, Abstract's book, p. 134, Saarbrücken 3-7September (1991)
- (2) E.Haslam, *Plant polyphenols*, Cambridge University Press, 74 (1989)
- (3) M.Tits, L.Angenot, P.Poukens, R.Warin, Y.Dierckxsens, *Phytochemistry*, (in press) (1991)