Dry Matter Distribution and Root Proliferation in Taro

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ABSTRACT

The proportion of dry matter in tops, corms and roots of the taro plants (Colocasia esculenta (L.) Schott) studied ranged from 44-72, 20-48 and 4-7 percent, respectively.

Spatial distribution of roots was investigated by carefully collecting roots to a depth of 25 cm at distances of 0-20 cm from the plant (S_1), 20-end of canopy (S_2) and 15 cm beyond S_2(S_3).

The root density in the S_1, S_2 and S_3 soil samples ranged from 126-582, 20-48 and 2-11 $\mu g/cm^3$, respectively.

Studies on Coleus Starch

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ABSTRACT

Coleus starch was isolated by standard procedures and its properties were studied. The granule size varies from 5 to 20, with majority between 8 to 16. The gelatinization temperature range is 65° to 85°C. Viscocity of a 2% solution is 37 sec (Redwood No. 1) at 75°C, which increases to 56 sec on cooling to room temperature and remains steady afterwards. The solution is translucent and of acceptable clarity. The solution stability is around 72 hr. The total amylose content is 33%, of which soluble amylose is 12.8%. The swelling volume is 25 cc/g of starch. The reducing value in terms of ferricyanide number is 2.74. The results are discussed in comparison with other tuber crop starches.