

UNPUBLISHED REPORT 1967/08

Description of a soil sample from river flats, South Esk River west of Avoca

by G. B. Everard

A sample of crust soil received from Mr T. V. Winnall, District Agricultural Officer, Campbell Town, has been examined. The sample is said to have come from river flats of the South Esk River on the property of Mr J. R. Nicholson 12 miles below the junction of Storeys and Aberfoyle creeks.

The soil is of silt grade and consists of sharp angular fragments and broken crystals of feldspar, quartz, tourmaline, sericite, biotite, ilmenite, pyrite, zircon, rutile or cassiterite and numerous minute organic fragments, the minerals being in nearly all instances fresh and unaltered.

The sparkle seen in the sample and said to be in the underlying river soil is due to the reflection of light from crystal faces. The minute organic particles show fine details of original shape and cellular structure and suggest remains of vegetation recently killed in situ as there is little damage due to abrasion or decay.

The examination indicates that the material is not a normal soil produced by weathering and disintegration of rock but by artificial crushing of recent date.

A spectroscopic examination gave strong lines for iron, chromium and titanium, a doubtful one for tin, and none for manganese.

[26 April 1967]