

Mauchline SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Brown forest
soils with gleying
SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

MAUCHLINE

PARENT MATERIAL

Reddish brown sandy
clay loam or sandy loam
till derived from Permian
sandstones.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Moderate or slow

REFERENCES

soil maps —
1:63 360 sheets
14 (Ayr)
22 (Kilmarnock)

memoirs —
Soils round Kilmarnock

LOCATION AND EXTENT

Central Ayrshire; between Mauchline and Tarbolton.
23 sq km.

LANDFORM

Undulating lowlands, 80-170 m, with gentle and strong
slopes.

VEGETATION

Permanent pastures; some arable.

CLIMATE

<i>av. ann. rainfall, mm</i>	1000-1100
<i>accum. temperature</i> <i>(day °C above 0°C Jan-Jun)</i>	1280-1450
<i>maximum PSMD, mm</i>	90-100
<i>growing season, days</i>	255
<i>field capacity</i>	early Oct to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	brown or dark brown	reddish brown
<i>texture</i>	sandy loam	sandy loam or sandy clay loam
<i>structure</i>	medium crumb	prismatic or massive
<i>stone content</i>	slightly stony	slightly to moderately stony
<i>potential rooting depth</i>	free rooting to about 50 cm impeded by compact till or induration	
COMMENT	Sandy loam topsoils and moderate permeability give conditions moderately well suited to cultivation despite level of precipitation.	

SOIL CHEMISTRY

Moderate levels of pH, exchangeable bases and
percentage base saturation becoming high in subsoils.
Total phosphorus is low in subsoils.

MAP UNIT VARIATION

Sandy loam subsoils are associated with rock near the
surface or water-modified till.