

Rowanhill SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Noncalcareous
gleys
SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

ROWANHILL

PARENT MATERIAL

Clay loam or clay till
derived from sediments
of Carboniferous age,
mainly shales and
sandstones with some
limestones and coals.

DRAINAGE CLASS

Poor

PERMEABILITY CLASS

Slow

REFERENCES

soil maps —
1:63 360 sheets
14 (Ayr)
23 (Hamilton)
24/32 (Peebles/Edinburgh)
30 (Glasgow)
31 (Airdrie)
39 (Stirling)
40/41 (Kinross/Elie)

memoirs —
Soils round Kilmarnock
Soils round Perth, Arbroath
and Dundee

LOCATION AND EXTENT

Midland Valley from Ayrshire to Midlothian and Fife,
principally the Slamannan plateau, the North Lanarkshire
uplands and the adjoining lowlands. 360 sq km.

LANDFORM

Undulating lowlands and uplands with mainly gentle
slopes. Altitudes up to 300 m.

VEGETATION

Ley and permanent pastures; some arable; some rush
pastures and sedge mires.

CLIMATE

	<i>Ayrshire</i>	<i>Lanarkshire</i> (below 180 m)	<i>Lothians/Fife</i>
<i>av. ann. rainfall, mm</i>	1000-1300	1000-1200	800-1000
<i>accum. temperature</i> (day °C above 0°C Jan-Jun)	1280-1450	1090-1220	1240-1410
<i>maximum PSMD, mm</i>	80-120	80-110	90-120
<i>growing season, days</i>	255	215	225
<i>field capacity</i>	early Oct to early Mar	mid-Oct to early Mar	mid-Oct to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	very dark greyish brown to greyish brown	greyish brown to grey
<i>texture</i>	clay loam, sandy clay loam or sandy silt loam	clay loam, clay or sandy clay loam
<i>structure</i>	moderate medium or coarse subangular blocky	weak coarse prismatic, becoming massive below
<i>stone content</i>	very slightly or slightly stony	slightly or moderately stony; stones generally strongly weathered
<i>potential rooting depth</i>	rooting restricted to topsoil (normally 15-20 cm thick) and occasional structure cracks	
<i>COMMENT</i>	Compact, moderately fine- or fine- textured, coarse-textured subsoils restrict water movement and rooting depth.	

SOIL CHEMISTRY

Parent material is locally alkaline due to the presence of
limestone. Inherently low in total and readily soluble
phosphorus.

MAP UNIT VARIATION

Some humic gleys occur in the higher rainfall areas and
locally elsewhere in hollows. Locally subsoils have coarser
textures.