

# Sorn SERIES

## A. SOIL MAP UNIT DESCRIPTION

### SOIL CLASSIFICATION

SCOT: Noncalcareous  
gleys  
SSEW: Cambic  
stagnogley soils

### SOIL ASSOCIATION

SORN

### PARENT MATERIAL

Till of clay loam or sandy  
clay loam texture derived  
from Lower  
Carboniferous sediments  
and Upper Old Red  
Sandstone sediments and  
lavas.

### DRAINAGE CLASS

Poor

### PERMEABILITY CLASS

Slow

### REFERENCES

*soil maps* —  
1:63 360 sheets  
14 (Ayr)  
22 (Kilmarnock)  
23 (Hamilton)  
24/32 (Peebles/Edinburgh)  
30 (Glasgow)  
31 (Airdrie)  
39 (Stirling)

*memoirs* —  
Soils round Kilmarnock

### LOCATION AND EXTENT

Mainly in central Ayrshire north of Sorn and south-east of Ayr; other scattered occurrences throughout the Central Lowlands, particularly near Dumbarton, west of Lesmahagow and west of Douglas Water. *About 50 sq km.*

### LANDFORM

Undulating lowlands with drumlins, some hillsides, with gentle slopes; below 250 m altitude.

### VEGETATION

Permanent pastures with some arable; rush pastures and sedge mires.

### CLIMATE

*Ayrshire/Dunbartonshire      Lanarkshire/Stirlingshire*

<i>av. ann. rainfall, mm</i>	1000-1200 generally, rising to 1400 on the flanks of the Campsie Hills	
<i>accum. temperature (day °C above 0°C Jan-Jun)</i>	1250-1450	1090-1220
<i>maximum PSMD, mm</i>	82-128	80-90
<i>growing season, days</i>	225-255	215
<i>field capacity</i>	early Oct to early Mar	early Oct to early Mar

### SOIL DESCRIPTION

*topsoil*

*subsoil*

<i>colour</i>	greyish brown	reddish brown or reddish grey
<i>texture</i>	clay loam	clay loam or clay
<i>structure</i>	weak medium subangular blocky	massive or moderate coarse prismatic
<i>stone content</i>	slightly stony	moderately stony
<i>potential rooting depth</i>	rooting largely restricted to topsoil (25-30 cm) but some limited rooting to about 50 cm especially along structure cracks	
<i>COMMENT</i>	Moderately fine or fine subsoil textures, slow permeability and surface wetness are typical features.	

### SOIL CHEMISTRY

Slightly acid, high percentage base saturation in subsoil and parent till.

### MAP UNIT VARIATION

Very red subsoils are associated with a high proportion of Old Red Sandstone sandstones, clayey subsoils with a high proportion of Carboniferous sedimentary rocks.