**SO9: Eutrophic, Mesonatric, Grey Sodosol**

**General description of the soil**
A texture-contrast soil which is strongly sodic in the upper 0.2 m of the grey clayey B2 horizon which has a high base status.

**Distribution:**
A very common and widespread soil throughout most of the Sodosol occurrences shown in Figure 6.13.

**Typical land use:**
Grazing of native pastures.

**Common variants:**
Surface is frequently gravelly, B2 horizon may be strongly mottled.

**World Reference Base:**
Albic Solonetz.

**Other names:**
Solodised Solonetz or Solodic Soils.

**Environment and location of the example profile**

**Landform:**
Gently undulating plain.

**Parent material or substrate:**
Sandstone.

**Drainage class:**
Very poorly drained.

**Surface condition:**
Hardsetting.

**Site disturbance:**
Extensive clearing.

**Native vegetation:**
Open forest (including Allocasuarina luehmannii, Eucalyptus populnea and Cassinia species).

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**Site location**

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**Site climate**

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**Soil morphology**

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**Soil chemical and physical properties**

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* Bulk sample
Key profile properties

**General qualities of the soil**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Infiltration</strong></td>
<td>Slow to moderate and less if compacted.</td>
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<tr>
<td><strong>Available water store</strong></td>
<td>Very small to small depending on thickness of A horizons.</td>
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<tr>
<td><strong>Permeability</strong></td>
<td>Low to very low.</td>
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<tr>
<td><strong>Physical root limitations</strong></td>
<td>Water logging in the A2 will restrict aeration. Dense B horizons will have aeration and strength limitations.</td>
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<td><strong>Erosion hazard</strong></td>
<td>Dispersible subsoils will contribute to soil erosion if exposed.</td>
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<tr>
<td><strong>Nutrient availability</strong></td>
<td>Very low fertility. Nitrogen, phosphorus, potassium and zinc are low. Copper is very low.</td>
</tr>
<tr>
<td><strong>Toxicities</strong></td>
<td>Medium increasing to high salinity below 0.8 m.</td>
</tr>
</tbody>
</table>

Gently undulating plain, originally open forest but now cleared for grazing

Acknowledgements: Soil image, soil description and laboratory data: Department of Natural Resources and Mines, Queensland, Maryland soil, Site 8. Landscape image: Alan Fox.