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ASSESSING THE SOILS OF TREENET SITES

Kevin Handreck

TREENET sites need to be chosen so as to simulate the soil environment in which the trees will eventually grow. This is probably impossible in detail. But some data must be collected so that different sites can be compared. Then, when different sites give different responses in a particular species, it may be possible to determine the cause of poor growth or specific symptoms of unthriftiness, or of good growth. Every area has a variety of soil types. Many urban situations are highly disturbed.

Factors to consider in a TREENET trial site

- Topography
- Position of trees on slope - top, middle, break, bottom
- Drainage lines
- Compaction level at surface and depth (measure using a penetrometer)
- Free lime levels at various depths
- Have soil (from several parts layers of the profile) analysed using the SASPAS Soil Kit - ask for:

  texture
  pH
  salinity
  exchangeable cations
  exchangeable sodium percentage
  available phosphorus
- Assess drainage from the colour of the soil
- Evidence of seasonal waterlogging from soil colour
- Depth to groundwater; salinity of the groundwater
- Look at existing trees in the area. Are there any problems? If there are, describe the symptoms.
- Heat load
- Root restriction
- Water supply
- During the life of the trial site, assess seasonal soil conditions and the response of the various species planted.