

## **SITE SELECTION FOR FOREST PLANTATIONS AND PERENNIAL HORTICULTURAL CROPS**

**Site selection for plantations and perennial horticultural crops** is the process of identifying areas of land capable of sustainable and economic crop production. It involves two aspects: 1) *site productivity* (or site quality), and 2) *site suitability*. Site productivity is a measure of the relative productive capacity of a site for specified crops. It is dependent largely on inherent soil and climatic features such as temperature, rainfall, soil depth, drainage conditions, and nutrient status. Shown below are examples of good and poor site productivity for forest plantations in north-east Tasmania. Site suitability is defined as the fitness of a given type of land for forest plantations and perennial horticultural crops, and it takes account of management constraints and land degradation hazards as well as site productivity.

Most site assessments for plantation forestry and perennial horticultural crops follow the principles of land evaluation outlined by the Food and Agriculture Organisation (FAO). Recently, forest growth models based on physiological processes (e.g. 3-PG and Promod used in Farm Forestry Toolbox) have been developed to directly relate site attributes to biomass production in forest plantations.

**Soil Professionals Pty Ltd is able to assess site productivity for forest plantations using both the FAO method and Farm forestry Toolbox, and also determine an overall rating of site suitability taking into account land degradation hazards and management requirements. We can also assess site productivity and suitability for horticultural crops using the principles of the FAO land evaluation system.**

