

Industrial hemp growing in Tasmania

Suitability factors for assisting in site selection



Industrial hemp (*Cannabis sativa*) is a versatile plant grown for either seed or fibre. Licenses to import, grow, manufacture and process hemp in Tasmania are granted by the Department of Health and Human Services under Ministerial delegation and with the cooperation of Tasmania Police and the Department of Justice. Tasmania Police inspect proposed growing sites and may suggest a number of initiatives to improve site security. Hemp grows on a range of soil types, although drainage is possibly the most important factor to consider when assessing site suitability.

Climate

Industrial hemp prefers a mild, humid climate, however it does grow well in Tasmanian conditions. Hemp is intolerant of frost and as such should be sown after the danger of heavy frosts has passed. Hemp reaches optimum growth rates when temperatures are between 15°C and 28°C. Hemp for fibre can be sown from September to January with crops reaching maturity 60-70 days later. Seed crops should be sown in October/November, reaching maturity and harvest in March/April.

Soil

Industrial hemp grows well on light- to medium-textured soils from sandy to light clay loams. Clay soils can be okay providing they are free-draining. Roots can penetrate to more than 2 metres, enabling access to moisture and nutrients deep in the soil profile. For this to occur, soils need to be well structured. Compacted soils can reduce yield in hemp. Soils with pH of more than 6 are preferred. Salinity and soil acidity are likely to reduce crop yields.

Drainage

Free draining soils are preferred for industrial hemp growing, drainage is one of the most important factors to consider when selecting a site.

Irrigation and soil water

Most crops can be grown without irrigation, however strategic irrigation can be applied prior to sowing, during emergence, and at early flowering. Good soil moisture is required for germination and early crop development. This period is critical to ensure canopy closure, which reduces weed infestation. Sowing into sites with a low weed burden will also reduce competition with developing seedlings. Industrial hemp germinates poorly in overly wet, heavy soils, so irrigation needs to be carefully monitored.

Slope and aspect

Industrial hemp can be grown on slopes between 0-20%. Hemp fills out into a thick canopy meaning that north facing slopes are preferred due to greater sunlight interception.

Pest damage

Birds have on occasion been known to decimate a seed crop. Sites that are surrounded by bush edges should be avoided for this reason.

Images supplied by Tasphoto Services, Department of Primary Industry, Parks, Water and Environment

Developing rules to guide enterprise suitability mapping

Many plants require particular climatic and land characteristics for best performance. Frost, winter chilling, summer heat, drainage, slope and salinity are some of these characteristics. For each enterprise mapped by the Department of Primary Industries, Parks, Water and Environment (DPIPWE), the Tasmanian Institute of Agriculture (TIA) consulted industry experts and reference material to define land and climate “rules” that distinguish suitable from less suitable areas. These rules define the boundaries between the different classes of the enterprise suitability maps.

Suitability classes used are well suited, suitable, marginally suitable and unsuitable. Any limiting factors are also identified to guide the management practices that could help to overcome the limitations.

Landowners and potential investors are able to access comprehensive soil, climate, crop and enterprise information plus complementary farm business planning tools at:

<http://dPIPWE.tas.gov.au/agriculture/investing-in-irrigation>

Disclaimer

Information in this publication is intended for general information only and does not constitute professional advice and should not be relied upon as such. No representation or warranty is made as to the accuracy, reliability or completeness of any information in this publication. Readers should make their own enquiries and seek independent professional advice before acting or relying on any of the information provided.

The Crown and Tasmanian Institute of Agriculture, their officers, employees and agents do not accept liability however arising, including liability for negligence, for any loss resulting from the use of or reliance upon information in this publication.

