

# LAND SUITABILITY FOR OLIVE GROVE

## 1. Does your property have well drained soil?

Too much water is the olive tree's worst enemy. If your soils are too heavy and/or tend to hold excessive water during extended rainy periods, then you will have to improve the drainage or even change the site of your grove to allow for extra drainage. Do not plant olives in areas that collect water, seep water after rain or hold soil moisture to the point of becoming boggy. Some soils won't drain sufficiently no matter what you do.

A sloping site does not necessarily mean that the area is well drained. For example, heavy clay soils, even on steep sites, are generally not suitable for olives due to their poor internal drainage. Soil pits up to six feet deep will assist in your understanding of the drainage. Agricultural departments and soil analysts are able to assess soil drainage.

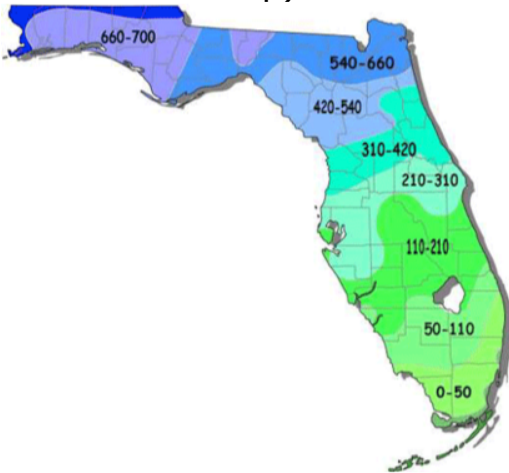
The preferred soil types for olives are sandy loams, loams and clay loams as they usually have suitable internal drainage combined with adequate water holding and nutrient storage capacity. Soil must be reasonably well drained for commercial olive production.

## 2. Does the property have an average daily temperature during Jan of 54 deg F or less?

A theoretical example of this would be a property where every day in Jan went from 32 deg F overnight to 75 deg F at noon. The average between the minimum of 32 deg F and the maximum 75 deg F is 54 deg F. This property would be at what is currently considered the warmest end of the suitable temperature scale. Another example would be a property with average Jan temperatures ranging from 27 deg F to 66 deg F thereby giving a suitable Jan average of 46 deg F . If your property has regular cold periods lower than 23 deg F each year, then you will need see our page on Olive Variety Suitability which outlines the suitable cold tolerant varieties.

Olive trees will grow vigorously in areas with warm winters. However, in lay terms, the problem occurs that due to the warmth, the tree

doesn't realize that it is winter and it continues to grow well. When spring arrives, the tree has not rested and doesn't realize that it is time to flower, nor does it have enough reserve nutrients available. No flowers equals no fruit and this makes it nonviable for commercial production. Many olive varieties require 200-300 chill hours. (See Florida Chill Map)



Even though good crops have been observed on some varieties of trees where the Jan average is above 54 deg F (12 deg C), there is not enough data available to recommend planting commercial olive groves at these temperatures.

If you are not sure about the figures for your property, ask the local farmers who have land at similar altitudes in the area. Climatic data from the US Weather Service will also give you a general idea for your total region but may not be 100% correct for your specific property. There are often areas within weather regions that differ significantly from the map data thereby making your property either suitable or unsuitable for commercial olive production.