Measuring the temperature of the soil

- Take a spade sample and leave the soil on the spade
- Immediately thereafter, take the soil thermometer from the transport case and pierce the centre of the soil sample on the spade
- Observe the temperature progression on the soil thermometer
- As soon as the temperature progression has stopped (°C) => read and evaluate the temperature

Measurement result:

Up to 21°C =>	100% of the available soil water goes into plant growth Soil organisms are active, optimal conditions
Above 25°C =>	the soil "overheats"; from this point on there is humus loss
At 37°C =>	Just 15% of the available soil water goes into plant growth, 85% is lost through evapotranspiration. Soil organisms are significantly restricted and in some cases, they start to die off.
Above 55°C =>	100% water loss through evapotranspiration
Above 60°C =>	Soil bacteria die off

Source: J.J McEntire, USDA SCS, Kernville TX, 3-58 4-R-12198, 1956

TEMPERATURE MEASUREMENT