

Durum wheat autumn sowing

Agronomic advice to improve cold tolerance.

Farming practices have a big influence in ensuring the DW overcoming winter. The plants to withstand the cold must be vigorous and healthy before the great cold.

The risk of winterkill is reduced when the sowing is done in the right period (1 October-20 November), the seeds should be located in a first layer of soil (max 2-3 cm deep) in a field with a good drainage, little bit moist and with a good fertilization. If one of these factors is missing you may run into a reduction in winter hardiness.

Needs a cold acclimatization to resist the plants in a very low winter temperatures.

The crown rot before the winter should be well developed and to do this before winter the wheat needs one to two months of middle temperature (4-9° C in the soil for 1 month). The plants start the winter with 1-3 true leaves at max. The leaves borned before the winter can be lost without reducing the possibility of plant survival. As long as the crown rot remains alive, new leaves and roots can be regenerated.

The cold resistance is the ability to tolerate low temperatures for a period of time. The cold reduce this capability both in time and intensity. Long winters are dangerous as well as short ones and very cold. The P₂O₅ Phosphorus helps plants to better survive the winter and spring recovery especially if the plants have had damage in the winter.

The sowing nitrogen fertilization generally reduces Winter hardiness of wheat. It is recommended the use only by the end of winter (March).

The snowpack greatly helps to insulate the temperature avoiding that falls too below freezing 0 ° C

The spring weather can help the wheat to recover the damage during the winter. At the end of winter if we have a hot and dry climate this translates into a process of cracking and drying of the soil very dangerous for the plants that are working to regenerate new roots. Instead a cool and moist climate creates a much more favorable environment for the recovery of plants.