

SUNFLOWER YIELD AS AFFECTED BY CYCLE LENGTH AND CLIMATE PATTERN

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Many Sunflower cultivars of different maturity class were grown as rain-fed crop in the southern Italy during seven crop seasons.

An yield of 1.7 t/ha - ranging from 1.31 to 2.20 t/ha between the cultivars - when no rainfall occurred during the anthesis was obtained; the Sunflower plants receiving the rain water during the same critical period produced 3.08 t/ha with a range from 2.54 to 3.63 t/ha between the cultivars. Therefore in rainy season the late cultivars attaining higher yield appear to be more suitable.

During the vegetative growth the Potential Evapotranspiration requirements are satisfied by the soil water reserve accumulated during the winter period; whereas during the anthesis a minimum of 20 mm rainfall is necessary to carry out the following yield formation process.