

TOMATO CROP DATA SHEET

Tomato Water Management
 PLANT DATE: March – May

SOIL: Coarse and Fine Textured
 HARVEST DATE: August - September

EFFECTIVE PRECIPITATION: Seed beds are usually prepared before the first of the year and planted as early in the year as possible. Germination is dependent upon soil temperature. A germination irrigation is not required if there is sufficient rain but this is exceptional.

IRRIGATION: Deep moisture in the soil profile is important during the late season to meet the usual climatic demand and maintain yields. This deep water can come from a preirrigation or from the germination and/or crust softening irrigations required to insure proper emergence. These irrigations are usually inefficient.

ROOT ZONE: The effective root zone will extend to 5-6 feet in fine textured soils and to 6 feet in coarser textured soils, under non-restricting conditions.

Seasonal irrigations are typically small and frequent (5-8 days) due to the possibility of mold caused by wet beds and a lower soil intake rate as the furrows are reused. The most efficient water users will sprinkle until laybye and then furrow irrigate with a tailwater recovery system.

ALLOWABLE DEPLETION: A practical allowable depletion is 50 percent, but since refilling irrigations are difficult to achieve while attempting to avoid mold during the later part of the season, a workable strategy is to adjust the frequency to reflect the ability of an irrigation to replace water. This will maintain the water stored in the profile for use later in the season.

Final-: The final irrigation must be scheduled to provide sufficient moisture until harvest and still allow the soil to be dry enough to support a mechanical harvester. The actual timing will depend upon the fruit holding characteristic of the variety and the amount of soil moisture remaining in the lower portion of the root zone.

WATER BUDGETING:

Average Seasonal ET (N/C/S) 1.6/1.7/1.4'
 Average Effective Precipitation 0.1'
 Average Salinity Control 0.3'

Water Use-in.*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Northern				0.9	4.1	8.9	5.1						19.0
Central				1.0	4.6	9.5	4.3						20.0
Southern				0.9	4.1	8.4	3.6						17.1
Deliveries-%		10	10		25	45	10						100

* Note: Assumed April 1 emergence date for mid-season length variety.