

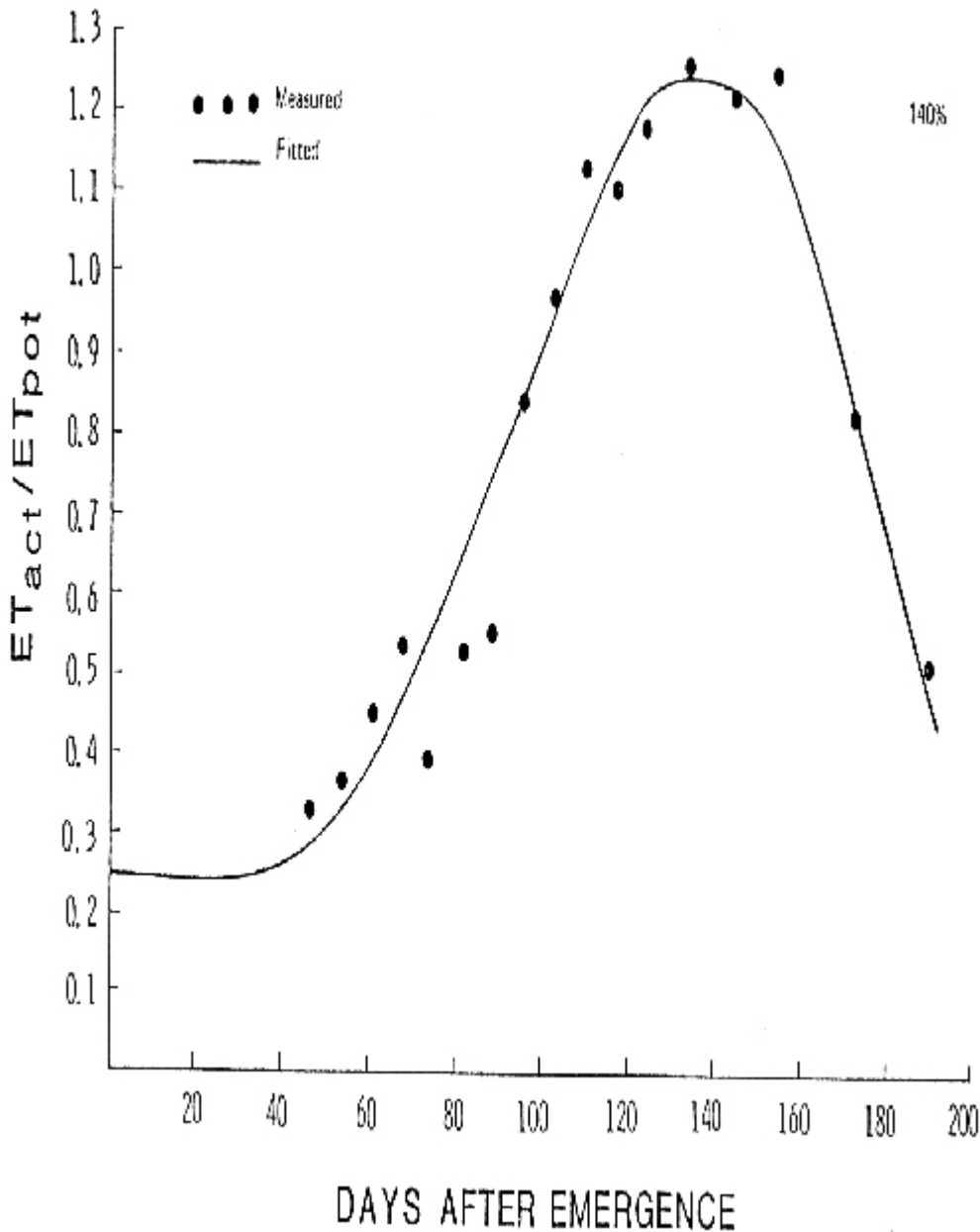


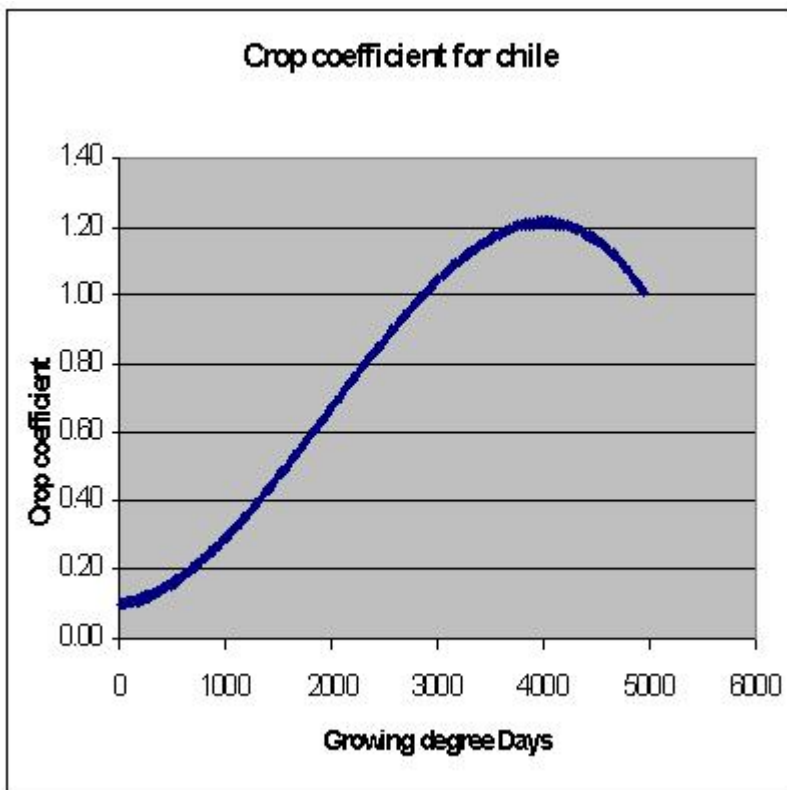
NEW MEXICO CLIMATE CENTER

New Mexico Crop Information

Chile coefficient(k) to calculate evapotranspiration(ET) where $Et=k*Eto$

Eto = reference evapotranspiration or potential evapotranspiration referenced to grass.





Crop Coefficient uses growing degree days (GDD) accumulated from planting based on the averaging method of calculating [GDD](#) with a maximum temperature cutoff of 86 F and a minimum cutoff temperature of 41 F. The Base Temperature is 41 F

The equation for the crop coefficient (k) is: $k = 9.80E-2 + 3.33E-5 \text{ Gdd} + 1.91E-7 \text{ GDD}^2 - 3.25E-11 \text{ GDD}^3$.

Crop Coefficient = $E_{\text{tact}}/E_{\text{tpot}}$ for chile yields of 37000 kg/ha green chile and 6000kg/ha red chile or 33000lb/ac green chile and 5300 lb./ac green chile.

The reference for this work is Saddiq, M. H. 1983. Soil Water Status and Water Use of Trickle -Irrigated Chile Pepper Dissertation in Agronomy at NMSU

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