

account by the Penman method, the associated crop coefficients are essentially independent of climate. The seasonal variations in crop coefficients correspond roughly to incomplete soil cover, full canopy, and senescing crop growth stages outlined previously (Jensen, 1968; Doorenbos and Pruitt, 1977). These crop coefficients thus depend on physiological stage of crop growth and degree of canopy coverage.

In applying Equation 20 to predict ET for a crop, estimates of ET_p are required. Several methods have been presented for calculating ET_p . Since values of ET_p vary with method (Table 7), crop coefficients will also vary and must be developed for use with a specific method for calculating ET_p .

Examples of crop coefficients for citrus, pasture and turfgrass, and corn are presented in Figures 10a, 10b, and 11, respectively. The k_c values shown by solid lines were taken from Soil Conservation Service Technical Release No. 21 (1967). These k_c values were developed from a modified Blaney-Criddle formula. Also on each graph are crop coefficients (k'_c) calculated from data presented in this bulletin and based on the Penman method for calculating ET_p ($\alpha = 0.05$, $k_1 = 0.7$). The curves may not be directly comparable, since the curves from the Soil Conservation Service

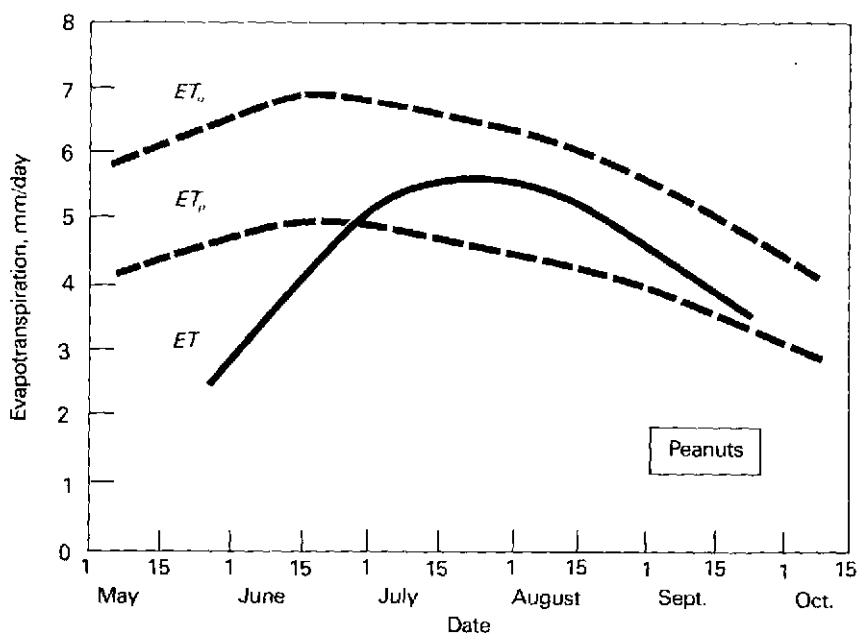


Fig. 9. Evapotranspiration (ET) for peanuts (reported by Stansell et al. (1976) for Tifton, Georgia).

NOTE: See Note, Fig. 5.