The ET data presented for pasture turfgrass ET data were reported by Stewart and Mills (1967) and Stewart et al. (1969). Annual ET was 11% lower than annual ET_p for Hialeah (Table 3). Monthly ET values were consistently lower than monthly ET_p values.

Sugarcane ET data reported by Shih and Gascho (1980) were taken in lysimeters in Belle Glade. On an annual basis, sugarcane ET was about equal to ET_p for Hialeah given by the Penman Method (Table 3). On a monthly basis, these sugarcane ET data were higher than ET_p values during June through December and lower during the other months.

Monthly ET values for rice were similar to sugarcane ET. The data shown in Table 9 were averaged from five different planting dates (March, April, May, June, and July) and were also adjusted (normalized) to a rough grain yield of 5500 kg/ha.

In summary, data presented in Figure 4 and in Table 9 verify the utility of the Penman method for estimating monthly ET for situations in which conditions exist for potential ET to occur. The peach orchard also demonstrated a case in which incomplete vegetative cover and management practices could significantly influence ET.

3.2.2 Seasonal Crop Evapotranspiration

Many crops are produced from seed to harvest over a 3- to 5-month time period. The ET for these seasonal crops changes with physiological development and ground cover as plants grow. Examples of water budget ET data are presented for several seasonal crops in Figures 5–9.

Doss et al. (1962) presented ET by irrigated corn from four years of experiments at Thorsby, Alabama. Figure 5 shows the four-year average ET by corn from those experiments. Since the summer climate in the Thorsby area is similar to that in north Florida, the potential ET and free water surface evaporation (E_o) calculated by the Penman method for Milton are plotted in Figure 5 for comparison. The ET_p calculations are based on $\alpha = 0.05$ and $k_1 = 0.7$, using Equations 10 and 18. These data demonstrate the canopy development, full canopy, and senescing canopy stages of seasonal crop ET. During the corn canopy development from emergence to early June, ET was below ET_p. Between July 1 and August 1, ET was higher than the reference ET_p, possibly because of advection from surrounding areas that were not irrigated. The ET dropped below ET_p as senescence progressed between August 1 and August 15 (maturity). Actual ET was lower than E_o throughout the season.

Figure 6 shows water budget ET data from Doss et al. (1965) for bahiagrass experimental plots averaged over the 1957 and 1958 seasons. These plots were irrigated when available soil water depletion reached 65 percent. This level of irrigation could have allowed some stress, since ET was consistently lower than ET_p. Also, these grass plots were periodically clipped, causing reductions in ET immediately after clipping. Figure 7