The «FAO Penman Monteith 56» formula (which we shall refer to as «Penman-Monteith FAO 98») is discussed in this article as the procedure which allows the estimation of referential evapotranspiration in reference to ETO in the most precise way. This is a fundamental agricultural activity in the management of hydric resources. The Penman-Monteith FAO 98 formula replaces the characteristics of diverse formulations which were used till recently in the climatic literature to estimate potential evapotranspiration. In this sense, the hydric balance employed by PET estimated for the Thornthwaite formula, is recommended to be replaced by the Penman-Monteith FAO 98" in order to obtain more accurate results. This fact it is being taught in the Climatology courses at the school of Geography at Universidad Central de Venezuela. With the idea in mind that this article may have a didactic value selected examples are included as to apply the estimation of evapotranspiration in reference to different conditions in cases with complete monthly climatic data, in cases with incomplete climatic variables ETO for daily mean data, ETO for scheduled mean data, etc. because we think that it is not only enough to know a formula; it is also important to apply the formula practically leading to its appropriate control. Calculus forms we have designed are also included and used with Excel to facilitate the ETO calculations. Computer programs used which allow us to obtain the ETO directly are indicated. Finally, coefficient culture tables are included which are used to determine evapotransportation for given cultures (CET) which allow us to obtain the ETO directly, knowing referential evapotranspiration (ETO)

Abstract

The «FAO Penman Monteith 56» formula (which we shall refer to as «Penman-Monteith FAO 98») is discussed in this article as the procedure which allows the estimation of referential evapotranspiration in reference to ETO in the most precise way. This is a fundamental agricultural activity in the management of hydric resources. The Penman-Monteith FAO 98 formula replaces the characteristics of diverse formulations which were used till recently in the climatic literature to estimate potential evapotranspiration. In this sense, the hydric balance employed by PET estimated for the Thornthwaite formula, is recommended to be replaced by the Penman-Monteith FAO 98" in order to obtain more accurate results. This fact it is being taught in the Climatology courses at the school of Geography at Universidad Central de Venezuela. With the idea in mind that this article may have a didactic value selected examples are included as to apply the estimation of evapotranspiration in reference to different conditions in cases with complete monthly climatic data, in cases with incomplete climatic variables ETO for daily mean data, ETO for scheduled mean data, etc. because we think that it is not only enough to know a formula; it is also important to apply the formula practically leading to its appropriate control. Calculus forms we have designed are also included and used with Excel to facilitate the ETO calculations. Computer programs used which allow us to obtain the ETO directly are indicated. Finally, coefficient culture tables are included which are used to determine evapotransportation for given cultures (CET) which allow us to obtain the ETO directly, knowing referential evapotranspiration (ETO)

Keywords

Potential evapotranspiration, referencial evapotranpiration, Penman-Monteith FAO formula, referential culture