

Estimation of PET measurement and actual AET in groundnut by various methods

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SUMMARY : A field experiment was conducted at dry farming research unit, Solapur. The experiment was conducted with groundnut crop in a field where two weighing types of lysimeter were installed. The experiment was non-replicated and estimation of reference crop evapotranspiration was measured on daily basis. At the same time, the daily weather data were recorded at nearby observatory and were tabulated. The PET were estimated and compared with lysimetric observations. The study revealed that among the methods tested, modified Penman method was found to be suitable for advocating the irrigation scheduling as it matched well throughout the crop season. The Blaney and Criddle and Pan evaporation estimation methods underestimated the values when compared with lysimetric data. As these methods are based on only air temperature, pan evaporation and other parameters such as radiation, relative humidity, bright sunshine hours. Wind factor was not included which also played a significant role in affecting ET. The results obtained through these methods are not comparable.

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