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Short communication

Relationship between PET and mesh covered pan evaporation at Solapur

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Potential evapotranspiration (PET) was estimated using Doorenbos and Pruitt (1977) method and related to mesh covered pan evaporation at Solapur. For this purpose data for the period from 1968 to 1994 (27 years) was collected at dry farming research unit were considered all through the 52 weeks in a year.

Mean weekly PET (estimated) was lower than measured pan values. A regression was fitted between the two (Fig.1), which enables estimation of PET from pan evaporation and is given below.

The regression equation is fitted to relate the PET with open pan evaporation.

$Y = 6.52 + 0.5345\ X \quad R^2 = 0.93$

Standard error of Y estimate = 2.707

Standard error of X estimate = 0.021

where, Y is the weekly PET and X is the weekly pan evaporation in mm.

REFERENCES

Doorenbos, J. and Pruitt, W. O. 1977. Crop water requirements. FAO Irrigation and Drainage paper No. 24, 144 p.

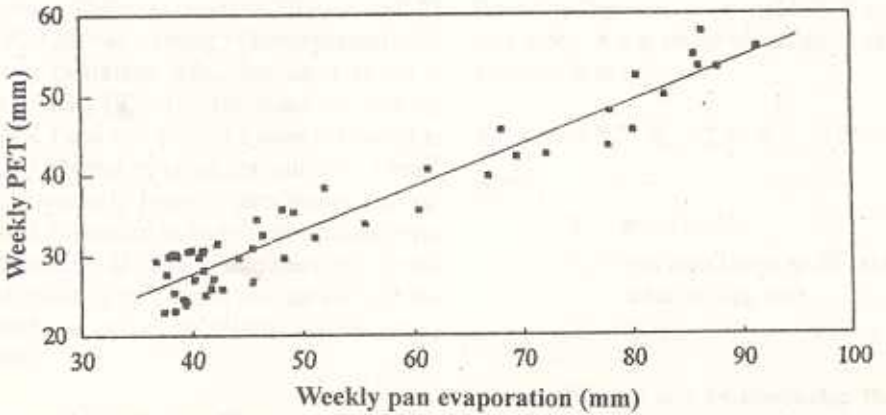

Fig. 1 Relationship between pan evaporation and PET at Solapur (1968-94)