

921. Pratap Narain, Verma, B., Bhardwaj, S.P. and Rao, D.H. 1981. Estimation of evapotranspiration rates of crops in weighing type lysimeter and their relationships with climatic parameters. Abst. No. 632, Voluntary Papers, 12th Internl. Congress

of Soil Science, New Delhi, India, Feb. 08-16, 1982: 188.

A mechanical weighing type (accuracy  $\pm 200$  g) lysimeter having an undisturbed soil monolith of 120 x 120 x 120 cm with provisions to measure seepage and runoff, was employed to measure ET losses from sorghum and wheat for two years. Seasonal ET from sorghum and wheat averaged 562 and 510 mm. Maximum ET of 8 to 10 mm/day from sorghum occurred during August and October in two years and of 7-8 mm from wheat during March during both years. Minimum LAI for achieving maximum ET was 2.00 in both crops when soil moisture was not limiting. The ratio ET/PE was 0.85 for wheat and 0.75 to 1.0 for sorghum. Correlation coefficients and regression equations between ET and meteorological parameters are reported. ET from crop was significantly correlated with pan evaporation; solar radiation and potential evaporation computed by Christiansen's formula.