Model perencanaan irigasi berdasarkan kesetimbangan kadar air (Planning of irrigation based on water content balance)

Abstrak

Plant productivity is determined by watercontent management in the root zone with respect irrigation. A proper irrigation or irrigation scheduling requires a program which questions of when to irrigate, how much water at apply and what best method to apply the water. A way to calculate the amounts of water available and required for supplemental irrigation is to analyse the water balance. The principal of water balance analysis is the total water additions (from all source) must equal the total water losses. soil water must be maintained at the range of available for plant. Information about water balance components in the root zone will assist in decision making leading to improvement of irrigation efficiency. The water balance approach to irrigation scheduling choses a strarting point total soil water in the root zone. Then the water balance equation is solved on a daily basis, considering the amounts of water that move into and out of the root zone for that day. Actual readings of soil water using gravimetric soil water sampling or a calibrated soil-monitoruing device such as a neutron probe, time domain reflectometry, or transiometers should be taken to calibrate the estimated balance.