

Innovative Lysimeter for on-farm Water Management

Evapotranspiration is a vital process in the water cycle because it is responsible for 15% of the atmosphere's water vapor. Measurement of evapotranspiration is important from irrigation point of view, as the things which can be measured can be managed effectively.

Lysimeters are the devices in which the crop grows in isolated tank filled with either disturbed or undisturbed soil. In lysimeters the water loss is directly measured by the change of mass. Evapotranspiration can be obtained with an accuracy of a few hundredths of a millimeter and small time period such as an hour can be considered.

The evapotranspiration rate from a cropped surface can be directly measured by the mass transfer method with the help of lysimeters.

Saving one unit of irrigation water has potential to make multiple units of water available for drinking, domestic and industrial needs. The existing lysimeters are costly and are not accessible and affordable to the farmers.

An incubatee of ICAR-CIRCOT; M/s. Green Prosperity Innovations, Satara, Maharashtra has developed this innovative lysimeter for effective management of water at farm level. The system developed comprises of intelligently designed components with high measurement accuracy and is easy to install, operate and manage with customized soft tool.

Product Features

- Gender neutral in Operability
- Used for both surface or pressurized irrigation systems
- Cost effective solution that is easy to install, operate and maintain
- User-friendly soft tool gives user customized solutions and guidance
- High working life with risk free operations
- Unique design
- Improves water use efficiency by 25%

Product Application

- Irrigation water quantity and time management
- Fertilizer or soil-based input management
- Sub-surface drainage design and management
- Reclamation of contaminated soils



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