

Suction Lysimeter

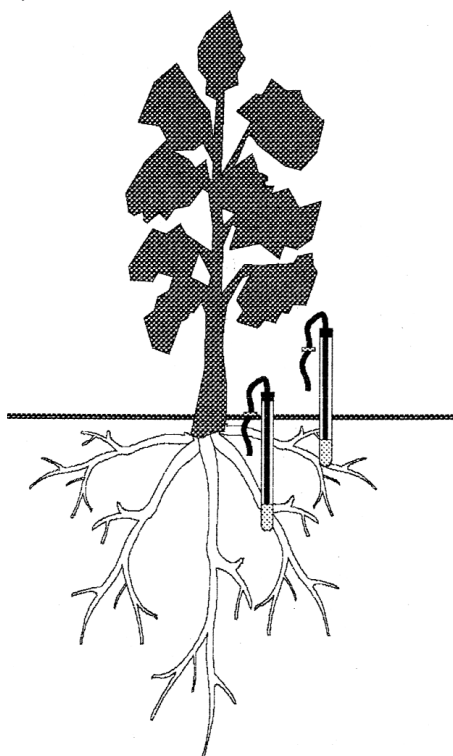
for Soil Monitoring at Root Level

Root Level Monitoring

The HI 83900 suction lysimeter is built with a porous ceramic cap connected to a transparent tube for soil solution extraction. A rubber capillary is inserted in the tube passing through a rubber cap and reaching the ceramic tip.

The HI 83900 series lysimeter is an ideal tool for collecting soil solution samples and then perform quantitative chemical analysis. In this way the operator can easily monitor the level of nutrients, such as ammonia, nitrate, phosphorous and potassium, sulfate, calcium, magnesium.

The ceramic tip of the lysimeter can be used in all types of soil, and it is made of sinterized material that does not react with nutrient elements. The soil solution, therefore, is not affected by the chemical composition of the ceramic cap, and the test results are always precise and reliable.



Use HI 83900 in conjunction with our HI 83215

The HI 83900 allows the extraction of a solution from the soil by creating a vacuum (negative pressure or suction) inside the sampler tube, that exceeds the soil water tension. This will establish a hydraulic gradient for the solution to flow through the porous ceramic cap and into the lysimeter tube. Typically, a vacuum of about -60 cb (centibar) should be drawn.

For better monitoring the soil solution composition throughout an entire growth period of crops, at least two lysimeters should be installed in the root zone of a representative plant, one at the upper part and the other in the lower part of the root zone.

For better accuracy and repeatability of results, it is recommended to replicate the above described installation in at least two more locations.

Available in 3 Lengths

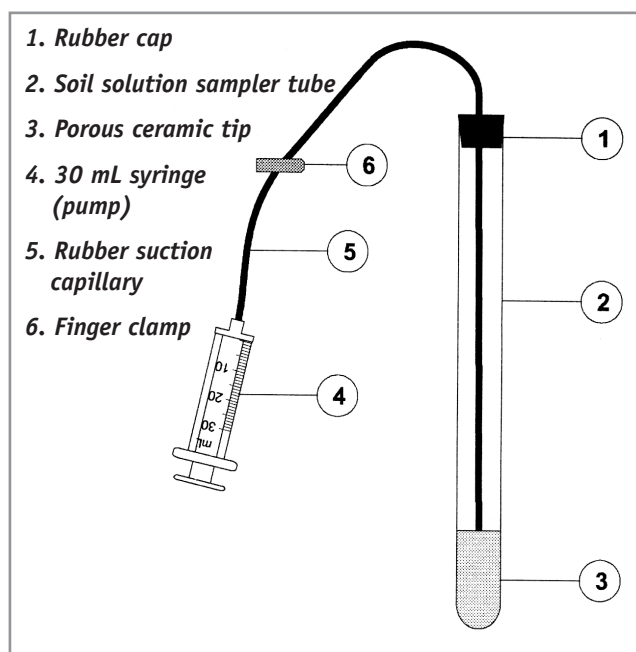


HI 83900-30
30 cm (0.98')

HI 83900-60
60 cm (1.97')

HI 83900-90
90 cm (2.95')

- Perfect companion to the HI 83225 and HI 83215
- Monitor soil composition right at the roots
- Easy to use



ORDERING INFORMATION

HI 83900-30 is comprised of 30 cm (0.98') tube sampler tube ending with porous ceramic tip, capillary rubber tube with rubber cap and finger clamp, cleaning solution stater kit (120 mL bottle), 30 mL syringe and instructions.

HI 83900-60 is comprised of 60 cm (1.97') tube sampler tube ending with porous ceramic tip, capillary rubber tube with rubber cap and finger clamp, cleaning solution stater kit (120 mL bottle), 30 mL syringe and instructions.

HI 83900-90 is comprised of 90 cm (2.95') tube sampler tube ending with porous ceramic tip, capillary rubber tube with rubber cap and finger clamp, cleaning solution stater kit (120 mL bottle), 30 mL syringe and instructions.

ACCESSORIES

HI 83900-25 Cleaning solution kit, 500 mL