MEASURING SUBSTRATE SALINITY

The report of Poole and Chase (1) continues a misconception that exists concerning the determination of potting soil salinity characteristics, namely, that potting soil conductivity can be determined from the leachate.

Our work (2) showed that the conductivity of the leachate from shallow containers is affected by the water-holding capacity of the mix, the leaching solution concentration, and, most dramatically, by the volume of leachate collected. As we stated (p. 477): "The leaching curves showed that the electrical conductivity of the leachate could not be used as a measure of substrate salinity. The conductivity of the leachate equaled the conductivity of the soil solution only in mixes with low percolation rates [and only momentarily]. The conductivity of the leachate from the porous mixes never reached that of the soil solution."

Other methods, such as the saturated paste extract, must be used to determine potting soil salt levels, not leachate conductivity.

**Authors' reply**

Kerr and Hanan (1) state that electrical conductivity of the leachate could not be used as a measure of substrate salinity. Wright (2) suggests the pour-through nutrient extraction procedure that was used by Chase and myself. Sure is difficult to keep everybody happy.

**Literature Cited**


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**IN SHORT, IN HORT**

LATIN AMERICA AND THE CARIBBEAN REGIONAL TRIAL OF TOMATO CULTIVARS

The FAO Regional Office for Latin America and the Caribbean has initiated a Regional Trial for Fresh Market Tomatoes as a further step in supporting the development of vegetable crops in the region.

The trial stems from the agreement adopted on 12 Dec. 1986 by the countries integrating the Technical Cooperation Network on Food Crops Production for Latin America and the Caribbean, to carry out regional trials of vegetable cultivars, assigning priority to tomatoes.

Vegetables have considerable socioeconomic importance among the countries of the region. Extraordinary technological development has been achieved in the production of some crops aimed at export markets. In contrast, the small, subsistence farmer faces serious constraints with these crops. Statistics indicate that in Latin America and the Caribbean, 447,000 ha are devoted to vegetables, of which 50% are planted with tomatoes. However, these face serious productive problems in some agricultural areas of the region, particularly in the tropics: adverse temperature and humidity conditions and a very high incidence of diseases and pests.

This first trial of tomato cultivars focuses on providing national vegetable crops research programs with new germplasm and technical information. Participating programs of 22 countries will carry out 56 local trials during the 1987-88 growing season. Fifteen common cultivars will be transplanted on each location on a randomized complete block experimental design with four replications. Trial cultivars are F1 hybrids and open-pollinated entries selected on the basis of promising agronomic characteristics focusing on disease and stress tolerance. The seed of each variety was obtained as a donation from the following sources: national vegetable crops breeding programs (Ministry of Agriculture, Costa Rica; ICA, Colombia; INTA, Argentina; and IDIAP, Panama); the Asian Vegetable Crops Research and Development Centre Tomato Breeding Programme; the Dept. of Horticulture of North Carolina State Univ.; and commercial seed companies (Asgrow, Peto Seed, B.H.N. Research, Royal Sluis, and Vilmorin-Andrieux).

The purpose of the trial is to: a) Evaluate, under a wide range of conditions in Latin America and the Caribbean, the yield and adaptation of selected tomato cultivars of open pollination or hybrids. b) Evaluate, in each location, the best cultivar from the area, comparing it with the selected cultivars of the trial. c) Provide national horticultural programs with new material that may be used as a source of genetic variability directly by the farmers or for incorporation into plant breeding programs, by means of crossbreeding, selection, and/or biotechnological techniques.