NOTES FROM CSU, SUMMER, 1982

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This summer promises to be one of the more interesting. Until Dave Hartley's replacement is on board, Hanan and Goldsberry have been manning the ramparts with able assistance from many of our students. Connie Smith and Lois Ponce (Fig. 1) have been working full-time this summer to take care of cutting and sales. The return from these sales comes back directly to us for operating the research range and many of the programs and experiments.

One important experiment for next winter is in the heat houses, where the new double Tedlar will be compared with FRP, DuPont 603, double, and a new Japanese, 4 mil polyvinyl (Fig. 2). We had to remove the Qualex, polycarbonate, that was on Heat House 4. Roses will be the main crop in these houses, with a number of different pot plants. Ken Goldsberry continues work with his miniature pot carnations (Fig. 3), and will be using the practicum students to

Fig. 1: Connie Smith (left) and Lois Ponce taking a break after cutting and bunching flowers for sale. Our two mainstays this summer for making sure we have some operating expense money next year.

Fig. 2: Who says Profesors don't work? K.L. Goldsberry on top, recovering Heat House 4 with a new Japanese, 4 mil vinyl which is as clear as glass. This will be a double film, with the heat houses planted to roses.

Fig. 3: K.L. Goldsberry's miniature pot carnation breeding program continues. These are the results of new crosses.

look at several miscellaneous crops. His cut flower course last spring had several interesting crops, and you may be interested to visit us next spring, 1983, around March to April.

An interesting study we have going this summer is a comparison of four potting composts, sponsored by Rockwool Industries (Fig. 4). The mixtures are: 1) peatmoss, perlite, vermiculite; 2) peatmoss, soil, perlite; 3) rockwool, perlite, vermiculite; and 4) rockwool, soil, perlite. There have been differences between the mixes on geraniums, but really no observable effects on pot mums and kalanchoes. There may be a distinct economic advantage for rockwool although there is considerable shrinkage in the soil mix, and rockwool mixes are heavier.

Gregory Kerr's salinity study is in full bloom (Fig. 5). In addition to the study shown in the picture, Greg has been working with potting soils, will include a laboratory study on

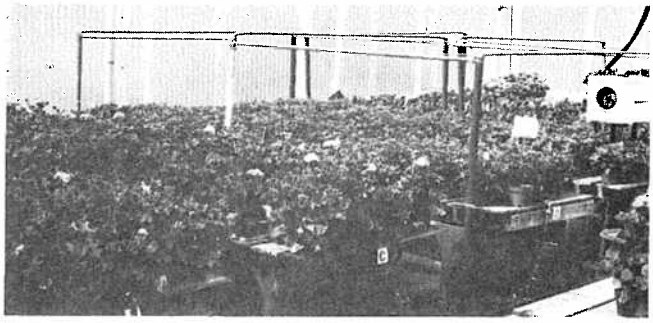

Fig. 4: Rockwool Industries study on the use of rockwool insulation as a soil amendment. Results look interesting and there may be an economic advantage to using rockwool.

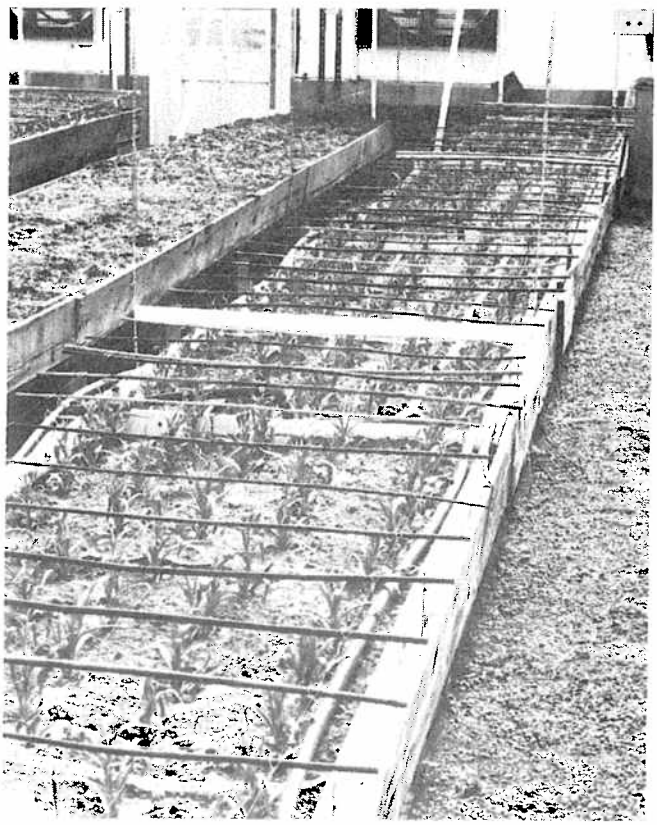

Fig. 5: Gregory Kerr's leaching experiment on carnations, for salinity control. These plots have a single drain so leachate from two different irrigation systems (Chapin double wall and gates) can be collected.

several soils and pot mixes, as well as proposing a new packing procedure for studies on greenhouse soils. The latter is very important in research so that we can get uniformity in our research. Greg will be finishing his thesis next spring and summer.

Things that give greenhouse people grey hair are indicated in Fig. 6. In addition to the usual wind damage that we, and others of you, suffered last winter, we had the second lightning stroke that I have observed in 19 years. Only this one cost us a little more. Nine $170.00 units were effectively destroyed by sufficient heating to shift their calibration. Two Phillips controllers were burned. That little bit, by the time we get it all back together, will run us close to $5000.00. The resistance bulbs in Fig. 6 have now been fused so, hopefully, the next lightning stroke won't get to them.

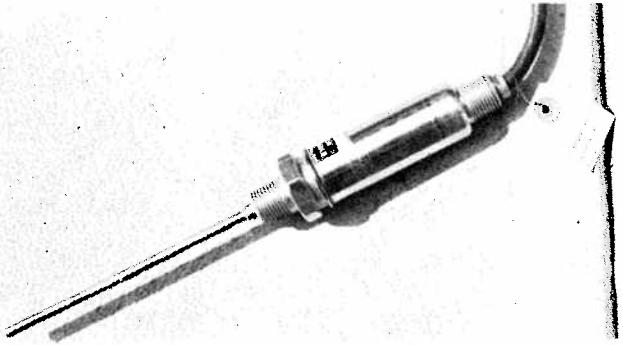

Fig. 6: One reason why research is expensive. One of these resistance temperature sensing units costs $170.00. We have one in each greenhouse for continuous remote recording of air temperature. Lightning struck this spring and destroyed 9 of them.

The economic situation is affecting us in other ways. Five times this spring, we have had theft incidents. Our newly installed intruder alarms caught three of them red-handed. The alarms were put in when, last year, about $1000.00 in tools disappeared. We've got our money back on the alarms in less than a year.

In addition to Gregory Kerr, Nick Gaone is one of our two Ph.D. students, Karen Kampman the other. Karen received her B.S. at CSU and Master's at Nebraska. She came in January and will be working on carnations. Nick will be examining translocation in roses this winter, and he will finish sometime next spring. We will have at least three foreign graduate students this fall, one from France, another from Saudi Arabia, and one from Mexico. Foreign applications are up.