'A-REST' (E-531) FOR HEIGHT CONTROL OF TULIPS

The potted tulip has been found to be very responsive to this plant growth retardant. It is possible that the material will be cleared for commercial greenhouse use in the near future. If this occurs, some growers may wish to run small trials with this compound. Do not attempt to treat a whole crop, since not enough research has been carried out to give clear-cut advise on the use of this material with tulips. The results, to date, indicate that this material should be applied only as a soil drench and within the first 5 days after placing the plants in the greenhouse. The response of the cultivars tested thus far is as follows:

Highly responsive—Abra, Albury, Bellona, Blizzard, Carl Bellman, Couleur Cardinal, Denbola, Edith Eddy, Golden Eddy, La Suisse, Makassar, Palestrina, Peerless Pink, Pink Supreme, Princess Irene, Prominence, Robinea and Yellow Present.

This group probably should not receive more than 0.2 mg active material per 6 inch pot. Those cultivars which appear to be moderately responsive are Christmas Marvel, Danton, Invasion, Olaf, Ornament, and Yokohama. This group will probably require 0.4 mg/6 inch pot. Research is underway to get more detailed responses but perhaps this information can be used as a guide.

A. DE HERTOGH

FITTONIA DISEASE
Rhizoctonia Disease of Seedling Plants

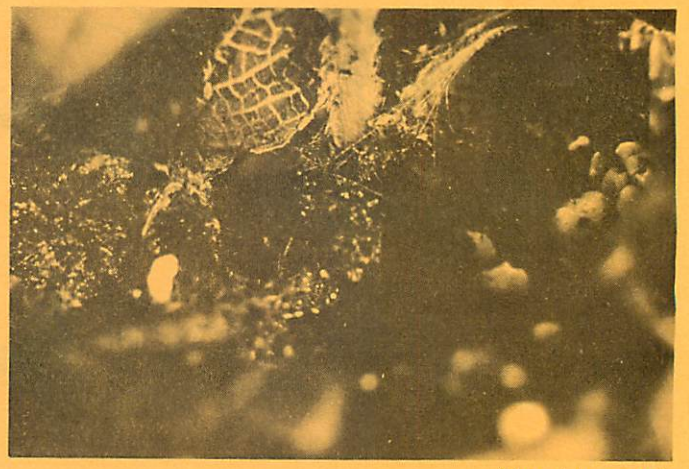
Research indicates that *Rhizoctonia solani* probably causes more different types of diseases to a wider variety of plants than any other plant pathogenic fungus, known.

(Photo: W. Carlson)

Fig 1A. Rhizoctonia solani *on* Fittonia sp.

To the glasshouse owner and operator *R. solani* is commonly encountered causing a "damping-off" of seedlings, cuttings, and young plants. This is due to the fact that young, rapidly growing, succulent, tissues are highly susceptible to Rhizoctonia attack, especially under conditions of high (excessive) moisture levels in the soil, together with warm temperatures and high, ambient humidity. The fungus usually attacks at or just below the soil line causing brick-red to dark brown, sunken lesions on the stem and upper roots. On close (hand lens) examination a fine network of brown strands (fungus tissue) can be seen covering the lesion plus adjacent soil particles (Fig. 1B). This network has the appearance of a spider web, but is more coarse than the webbing of a spider mite infestation. Leaves in contact with the soil are also readily invaded becoming water-soaked and darker green in color than normal.

Effective control of Rhizoctonia solani is accomplished by pre-plant sterilization of a well-aerated soil mixture, plus avoidance of overwatering. If these preventive measures fail, a basal stem and soil drench using pentachloronitrobenzene (PCNB, Teraclor 75% WP) at 1 tsp./gal. water, or benonyl (Benlate 50% WP) at 8 oz./100 gals. water, (1 Tsp./2 gal.), or chlorothalonil (Daconil, Bravo) at 1 lb./100 gal. water (1 Tsp./gal.). Repeat application at 2 week intervals or as needed to maintain control.



(Photo: F. Laemmlen)

Fig. 1B. Note collapsed stem at soil line and strands of fungus on soil surface.

FRANKLIN F. LAEMMLEN

STARTING POINSETTIA STOCK PLANTS

Most poinsettia producers will soon be starting to grow stock plants, usually from March until June, for cutting production for the 1973 season. The poinsettia stock plant will usually be started with the 2¼" type plant which is a rooted vegetative plant in a 2¼" square pot. These plants should be removed from the shipping box immediately upon receipt, spilled plants squared away, and watered if needed. Most pot plant growers will be growing their stock plants in containers of various sorts and sizes. These should be filled to the top with a good light-weight soil mix such as a 1:1:1 soil:peat:perlite composition. Plant the 2¼ plant as soon as possible in the stock plant container making sure that it is not planted below the soil line of the original small pot. A single plant per container is the preferred number for optimum cutting production. Usually a 5-or-6-gallon size container is employed for plants started early (March and April) whereas, slightly smaller ones can be used successfully for the later planting dates. After the plants are thoroughly watered-in they should be immediately placed on a liquid feed program similar to the same feeding schedule used for forcing the plants in September-December. A commonly used program would be 20-20-20 used to give 179-190 ppm NPK at each watering. Everything should be done to encourage good, sturdy, vegetative, growth. Greenhouse temperatures should be kept high, at least 75° daytime and 65-70° at night. Likewise, keep the relative humidity up to encourage top growth and good branching. At about 10-14 days from potting the plants can be soft pinched. Also, a disease preventative drench of Dexon-Terrachlor or Dexon-Benlate should be applied. For Dexon-Terrachlor use 4 oz. Dexon 35 and 4 oz. Terrachlor 75 WP or Benlate 50W per 100 gallons of water. Partial shade may be needed during the first several days, but should be promptly removed once the 2¼ is established.

KEN SINK