Possible

**VIRUS DISEASE in European red mite**

Examination of diseased European red mites from walnut trees in the San Jose and Linden areas produced no evidence that bacteria, fungi, or protozoa were responsible for the disorder. However, electron micrographs did reveal the presence of particles that appear to be a non-inclusion-type virus. No similar particles were found in preparations from healthy mites.—Edward A. Steinhaus, Insect Pathology, Dept. of Biological Control, Berkeley.

**Problem of control of CYCLAMEN MITE on strawberries, complicated**

Search for pesticide materials effective against the relatively resistant cyclamen mite on strawberries is complicated in California by the long harvest season—weekly from April till November—as it is impractical to apply materials which leave a toxic residue on the strawberries. A satisfactory pesticide must give a high degree of control, because the cyclamen mite population can build up explosively from a few individuals surviving under the protective cover of the folded leaves and crowns of the plants. In addition, the pesticide also must be harmless to humans and relatively so to natural enemies of the cyclamen mite.—William W. Allen, Dept. of Entomology and Parasitology, Berkeley.

Weighing tank measures

**WATER USE BY CROPS under changing conditions**

Minute losses of moisture from soil and plant surfaces in a 20' diameter plastic tank are automatically recorded by a 50-ten scale in an underground chamber. The open top of the tank is set flush with the ground in a cropped field at Davis. Instruments adjacent to the tank and under nearly identical soil conditions record temperature and moisture changes at various depths. Other instruments above the cropped surface measure radiant heat energy, wind movements, and temperature and moisture gradients in the air. The three sets of records for certain hourly periods are correlated for the study of the basic processes involved in the use of water by plants.—William O. Pruitt and David E. Angus, Dept. of Irrigation, Davis.

**YOUNG REDWOODS in coastal fog belt**

Stands of young redwood trees throughout the commercial area in the northern Coast Range are being sampled for growth rates by measuring the widths of annual rings on cores extracted from trees by an increment borer. Also some permanent sample plots are remeasured periodically. A table of expected growths is being constructed, on the basis of density of stand, number and kinds of trees, and the heights of the trees in relation to their age.—Marshall N. Palley, School of Forestry, Berkeley.

Study of **SCALE INSECT PESTS directed toward improved control**

An extensive taxonomic study under way in Davis has a dual objective: to assist biological control measures against scale insects—including the armored scales, the soft scales, and the mealybugs—now in California; and to give a basis for protective quarantines against the introduction of destructive species.—Howard L. McKenzie, Dept. of Entomology and Parasitology, Davis.

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