

-now ready for distribution-

Single copies of these publications—except Manuals and books—or a catalog of Agricultural Publications may be obtained without charge from the local office of the Farm Advisor or by addressing a request to: Agricultural Publications, 207 University Hall, University of California, Berkeley 4, California. Make checks payable to The Regents of the University of California.

GUM DISEASES OF CITRUS IN CALI-FORNIA, by L. J. Klotz, Cir. 396 (rev.).

HOW TO CONTROL RATS AND MICE, by Tracy I. Storer, Leaf. 127.

LEAF AND SOIL ANALYSIS IN CIT-RUS ORCHARDS, by Homer D. Chapman, Manual 25 (75¢).

DESIGNS FOR BULK BINS, by Michael O'Brien. Cir. 490.



Penalty for private use to avoid payment of postage, \$300 University of California College of Agriculture, Agricultural Expariment. Station. Berkeley 4.

Director

Annual Report of Bul

Free—Annual Report or Bu letin or Report of Progres Permit No. 1127

Study of diurnal changes in

PLANT TRANSPIRATION

Transpiration rates of plants are usually highest during the day and lowest at night, closely corresponding to diurnal variations of solar radiation and evaporative demands.

Transpiration is subject to diurnal fluctuations even under conditions of continuous illumination and controlled

constant environmental conditions. Under such conditions peak rates are still observed at approximately noon and minimum rates are observed at midnight.

Current studies are designed to evaluate the mechanism for the plants' internal control of transpiration rates and the importance of the mechanism with reference to field transpiration measurements.

—Yoash Vaadia, Dept. of Irrigation, Davis.

DONATIONS FOR AGRICULTURAL RESEARCH

Contributions to the University of California, Division of Agricultural Sciences

BERKELEY	
Chemagro Corp	
Colloidal Preducts Corp	
Fibreboard Paper Products Corporation\$25.00 For forest products research	
Mendosa Farm Enterprises	
New Zealand Forest Products Limited\$250.00 For wood chemistry research	
Niagara Chemical Division, Food Machinery Corp. 80 lbs. 25% Tedion W.P. 36 lbs. 25% Thiodan W.P. 10 gals, Thiodan emulsion	
For walnut insect investigations	
Rohm and Haas Co	
Stauffer Chemical Co 2 gals. Trithion 4 Flowable For walnut insect investigations	
Timber Products Company\$1,000.00 For wood pulping research	
Union Carbide Chemicals Co	
U. S. Atomic Energy Commission \$20,286.00 For investigation of radiation sterilized soil as a medium for growth of plants and microorganisms	
U. S. Public Health Service\$29,870.00 For investigation of genetic problems in a mold	
DAVIS	
California Cantaloupe Advisory Board\$3,500.00 For studies on cantaloupes	
California Farm Bureau Federation	
California Strawberry Nurserymen's Association\$1,500.00 For research on nematodes affecting strawberries	
Chipman Chemical Company, Inc 1 gal. Butoxone For range weed control research	
Eli Lilly and Company	
Ferry-Morse Seed Company	
grass seed For turf research	
Glass Container Manufacturers Institute, Inc	

For test packs of processed foods

Grower-Shipper Vegetable Association
For lettuce breeding project \$6,360.00 For vegetable crop disease investigations in the Salinas-Watsonville area \$5,500.00
Salinas-Watsonville area\$5,500.00
Malting Barley Improvement Association
National Plant Food Institute\$2,000.00 For grain sorghum fertilization study
Olin Mathieson Chemical Corporation
Paragon Electric Company
Spencer Chemical Company\$500.00 For experimental work on selective herbicidal activity of carbyne
Strawberry Exchange Cooperative\$100.00 For research on new varieties of strawberry plants
Sugar Research Foundation, Inc. \$2,650.00 For research in food science
U. S. Public Health Service
For research on fruit respiration and ripening\$18,591.00 For research on infectious hepatitis virus in dogs\$1,725.00
For research on trisonic inheritance in tomatoes\$1,725.00
For studies in veterinary medicine
For studies on structure of the milk fat globule membrane. \$28,810.00
LOS ANGELES
Perlite Institute, Inc