

PROTOCOL FOR MONITORING OF THE JAPANESE BEETLE
SOIL TREATMENT PROGRAM, SACRAMENTO COUNTY, SPRING 1986

I. OBJECTIVE

To monitor the environmental levels of pesticides used during the Spring 1986 Japanese Beetle Soil Treatment Program to insure that residues do not exceed levels documented in 1984 and 1985.

II. PERSONNEL

The monitoring program will be conducted by the Environmental Hazards Assessment Program (EHAP) of the California Department of Food and Agriculture (CDFA) under the supervision of Randy Segawa (916-324-8916, ATSS 454-8916). All questions concerning this study should be directed to him.

III. MONITORING PLAN

Turf/thatch, soil and waterways will be sampled to determine pre-treatment and post-treatment levels of diazinon.

A. Turf/Thatch - Three replicate samples will be collected from one property at the following times: prior to the first treatment, day after each treatment, 5, 9, and 13 days after each treatment. Turf and thatch will be combined into one sample and will be analyzed for total residues.

B. Soil - Three replicate soil samples will be collected from each of two depths, 0-2 cm and 0-15 cm. Samples will be collected from each property using the same timetable as turf/thatch.

C. Waterways - All major waterways draining the treatment areas will be monitored during the first major storm after initiation of the treatment program.

IV. SAMPLING METHODS

All sampling media and containers will be prepared and prenumbered at the CDFA Meadowview Operations Center. Each container will be shipped to the sampling sites with an accompanying chain of custody record. The chain of custody will be filled out by all parties handling the sample from the time it leaves the Center until the sample is received by the lab.

A. Turf/Thatch (39 samples)

Samples will be collected in glass containers with a stainless steel tube. Each sample will consist of four 6.0 cm diameter plugs.

B. Soil (78 samples)

Samples will be collected in glass containers. Each of the 0-2 cm samples will be comprised of the four 6.0 cm diameter plugs with the turf and thatch removed. The 0-15 cm samples will be collected with a Veihmeyer tube. Each sample will consist of four 2.25 cm diameter cores.

C. Water (6 samples)

Grab samples of water will be collected in one liter glass amber bottles.

After collection, all samples will be cooled immediately using dry ice or wet ice, and kept frozen or refrigerated until analysis.

V. ANALYSIS OF SAMPLES

Because of the heavy sample load, pesticide analyses will be conducted by the CDFA Chemistry Laboratory Services Branch, and other laboratories as necessary.

2/4/86