actually gnaw off roots and lower stem parts.

With intensively cultured plantings as golf course turf and greenhouse soils, a salin-alkaline amount of carbonate salts is possible in just twelve waterings of a virgin soil. In all areas dependent upon water of but a few grains of "hardness", the problem of retarded growth rate or plant loss is predictable. With ninety per cent of growing plants being watered, the ready ability to maintain tissue-water balance is essential and is achieved only by the quality of the irrigation water applied. Plants absorb soil moisture as a function of atmosphere pressure in direct ratio to total soil moisture stress. This action of osmosis is slowed or even reversed, when total moisture stress is high due to accumulated carbonate salts. This is seen as a "blueing", "yellowing" or "wilting" of grasses and greenhouse plants, even if soil is adequately moist.

#### TREATMENT OF IRRIGATION WATER

Efficient and economical treatment for eliminating and removal of carbonate salts in water and soil is automaticially possible with Release, Irrigation Water Treatment metered into main pipe flow by Syncro-Flo Automatic Irrigation Injector. This method presents the highest efficiency and most feasible means for treating of irrigation waters. By precise injection of Release, carbonates are chelated from the minerals, allowing plant use of these nutrients. Surface tension of the water is lowered and total soil moisture stress is reduced to allow water soil penetration. The released calcium displaces the absorbed sodium on soil particles providing leaching ability of the sodium out of the root zone; the dissolved carbon is carried down in the drainage water. Plant growth improvement is soon apparent as the rain like quality of the amended water is provided. Each water should be individually analyzed to determine the degree of treatment required. The average midwest water requires but one gallon of Release to treat 9,000 gallons of raw water. The cost is approximately twenty cents per 1,000 gallons of amended water.

The unit is installed directly into the main irrigation pipe line, near to water supply. The unit is complete, no buffer tanks or auxillary power is required. Syncro-Flo is hydraulically operated, automatic and synchronous in response to water flow Precise and fool-proof degree of injection is accomplished, regardless of water pressure fluctua-tions, flow demands or surges. No reduction of water supply pressure is made and full volume as before installation is enabled. It provides up to flow rates of 500 gallons per minute, more than one unit may be used for higher flow demands. One filling of Release provides 200,000 gallons of treated water. Back flushing is never required. Refills in ten minutes.

Release Water Treatment is non-corrosive to iron or copper pipe, or brass or bronze valves and sprinklers, at all rates of treatment.

NOTE 2: This method recommended is not to be confused with sodium salt water softeners, which should not be used in irrigation treating.

Phone: 312 669-5452 or 312 669-5771

LOUIS SCHACHTNER

Distributor

BLACK DIAMOND HUMUS SOIL

HUNTLEY, ILLINOIS

### TORONTO C-15 SOD and STOLONS

(Grown on sterilized soil with seedheads removed)

Merion and Kentucky Bluegrasses

SURE-GRO Plant Foods

12-6-6 Organic Base 16-8-8 12-6-6 10-6-4 5-10-5 10-10-10 10-3-7

H. & E. Sod Nursery, Inc.

4301 W. Flossmoor Rd.

SY camore 8-2210

Tinley Park, III.

#### EVERSPRAY CO.

· UNDERGROUND LAWN SPRINKLING SYSTEMS

### IRRIGATION EQUIPMENT AND SUPPLIES

GEORGE WELLEK

9250 GOLF ROAD DES PLAINES, ILLINOIS 296-5555

## Nels J. Johnson, Tree Experts, Inc.

SINCE 1930

Complete, economical tree service for Private Estates, Parks, Municipalities, Golf Courses, Cemeteries, Schools, Industrial Areas.

All phases of Arboriculture, Diagnosing, Pruning, Treating, Transplanting, Fertilization, Hydraulic and Mist Spraying, Removals, Stump Routing, Municipal Forestry.

-FULLY INSURED -

GRADUATE FORESTERS . LICENSED ARBORISTS MAIN OFFICE: 912 Pitner Avenue, Evanston, Illinois Phones: GR eenleaf 5-1877 — GR 5-5255 "FIVE ELLUMS ARBORETUM"

Walnut Drive Libertyville, Illinois Phone: EM pire 2-1121

Hinsdale, Illinois — FA 5-0970 Geneva, Batavia, St. Charles — All Hours — 231-4840

# PRECISION BLENDED TOP DRESSING

Custom blended to your specifications by our modern equipment.

# Buy when you need -Eliminate costly storage

We sell an air dried, uniform and free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HUMUS - BLACK SOIL

## HENRY FRENZER

2-0290 CR estwood 2-5267

1719 Grove St. Apt. 8 Glenview, Illinois