

Excessive Manure On Farm Crops Can Affect Water

Supplying manure to the land in excess of crop requirements can add nitrates to groundwater above potable water standards, scientists with the Agricultural Experiment Station at the Pennsylvania State University

cautioned recently. The occasion was the 3rd International Symposium on Livestock Wastes April 21 to 24 at the University of Illinois.

From five years of experiments, Dr. L. F. Marriott and Prof. H. D.

Bartlett found that large annual injections of dairy manure slurry under the surface of orchardgrass sod will continue to release high amounts of nitrogen to a crop already over supplied.

The studies were made to determine what happens under Pennsylvania soil and crop conditions when concentrated livestock

operations use the land for manure disposal. Dairy manure slurry was applied with commercially manufactured injection equipment for liquid manure tank spreaders. Dr. Marriott is associate professor of soil fertility at Penn State and Professor Bartlett is professor of agricultural

engineering.

Disposal rates of manure slurry ranged from 120 to 600 tons per acre yearly for three years. The lowest rate supplied 700 pounds of nitrogen per acre per year. Two years after the application were discontinued, the Penn State scientists still found nitrate nitrogen in the soil water in excess of 10 milligrams per liter, the potable water standard. This was found at a depth of 4 feet where the lowest rate has been applied.

The Penn Staters did find that more modest levels of manure slurry contributed relatively low amounts of nitrate to groundwater. Fifty to 80 tons of slurry per acre, supplying 300 to 500 pounds of nitrogen per acre, were injected under orchardgrass sod in November 1973 or in April 1974 to compare fall and spring applications.

Nitrate nitrogen from the fall application had moved down 4 feet in soil water by June of 1974 but remained near the potable standard of 10 milligrams per liter after July. The nitrate nitrogen from spring applied manure

never exceeded 10 milligrams per liter during the growing season.

SUTAN ATRAZINE

Apply Sutan Atrazine 18-6-G, with our Gandy disk-mounted granular applicator.

Spray Lasso & Atrazine or liquid nitrogen with our sprayer.

Furadan and Dyfonate for root worm control
Buytrac 118 for weeds in Alfalfa.

JONAS S. EBERSOL

1/2 miles North of Bird-in-Hand on Stumptown Rd.

Growers Plan Grape Tour Here

A grape growers tour and picnic have been set for Saturday, May 17, beginning at Lancaster County's Pequea Valley Winery, Willow Street. The bus tour will start at 12:30 a.m. In case of rain, the event will be held the same time and place on the following Saturday, May 24.

Demonstrations of vineyard equipment and grape growing techniques will be held in two area vineyards. Post driving, trellis erection and various planting, cultivation, and

spraying techniques will be demonstrated. Tentative plans include a demonstration of an automatic grape picker.

After the tour, the buses will return to the winery for a chicken barbecue. Cost for the tour and barbecue is \$4 for members of the Southeast Grape Industry Association, and \$6 for non-members. Reservations must be made by May 8 with J. E. Savolainen, treasurer, S. E. Grape Industry Assoc., Box 35, Brogue, PA 17309.

COMPLETE FARM PAINTING



WE USE BRUNING QUALITY PAINT AND IT DOES STAY ON!!!

AERIAL LADDER EQUIPMENT:

- Modern and Efficient Method
- Reasonable Prices
- Spray On and Brush-In Method
- Sandblasting if Necessary

FOR FREE ESTIMATES
WRITE:

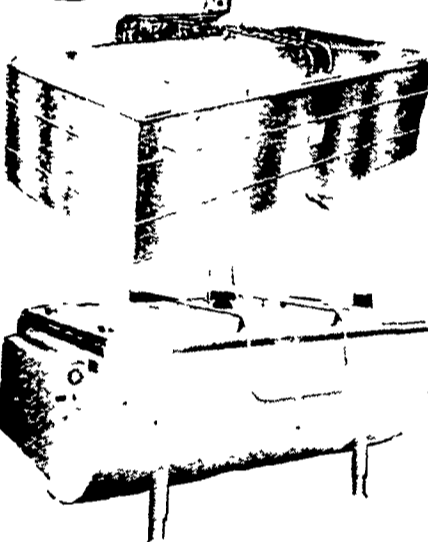
DANIEL S. ESH

(C RALPH MILLER)

SPRAY-ON AND
BRUSH-IN PAINTER

BOX 350A
RONKS PA 17572

FOR COOL MILK . . . FAST!
SALES and SERVICE



SUNSET

OR

GIRTON
TANKS

New 18 Can All Steel Can Cooler
New & Used Air & Water Cooled Diesels
Used Bulk Tanks & Can Coolers.

For Complete Refrigeration on Milk Cooling
in Central Penna., Contact:

CHRIST K. FISHER

RD2, Loganton, PA 17747

AVAILABLE NOW SOYBEANS These Top Yielding Varieties

- ★ Certified Amsoy 71
- ★ Certified Beeson
- ★ Certified Cutler 71
- ★ Certified Kent
- ★ Certified Wayne
- ★ Certified Williams
- ★ Amsoy (not certified)
- ★ Cutler (not certified)
- ★ Legume-aid Inoculant
Planter Pack
10-2 bu. sizes \$3.40

P. L. ROHRER & BRO., INC.

SMOKETOWN, PA.

Phone Lanc. 397-3539



Royal MH-30... It's fast acting, long lasting sucker control.

Each season, more and more tobacco growers are switching to Royal MH-30 growth regulator.

They've watched it perform on neighbor's fields, they've seen the results of University trials, and are convinced it's the most effective systemic sucker control available.

Royal MH-30 gets into the plant and working in half the time of regular MH-30, greatly reducing the danger of wash-off from unexpected afternoon showers. In trial after trial, Royal MH-30 has consistently proved to be 25-35% more effective, and even kills small suckers that

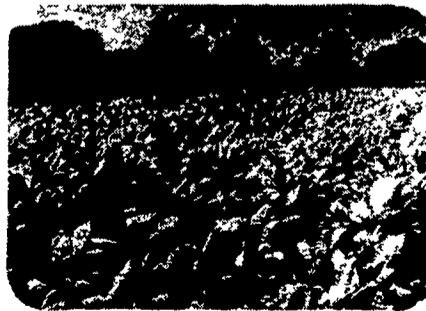


have emerged on tender, fast-growing tobacco. This year, some chemicals are going to be in short supply so talk to your dealer today and arrange for enough Royal MH-30 to treat your crop. It's the best systemic sucker control money can buy. Looking for a product to control early suckers? Talk to him about Royaltac, an outstanding contact chemical. From the world's leading producer of tobacco growth regulators... Uniroyal Chemical, Division of Uniroyal, Inc., Naugatuck, CT 06770.

As with all agricultural chemical products, Royal MH-30 and MH-30 should be used at labeled rates. Research at North Carolina State University has shown no increased benefits from using excessive rates.
*Trademark of Uniroyal, Inc.



Faster than MH-30
Sorbatran, a special surfactant ingredient, gets Royal MH-30 into the plant and acting in half the time of regular MH-30. Gives effective sucker protection within 6 hours of application.



High return per acre
Even though Royal MH-30 is significantly more efficient, the cost is surprisingly low. Because good sucker control increases crop value, many growers are experiencing as much as \$20 returned for every dollar invested.



Easy to apply
Royal MH-30 is easy to apply either by tractor sprayer or compressed air shoulder units. Check with your dealer about a Royal MH-30 program for your acreage today.