

Screw worm eradication prospects look good

NEW YORK, N.Y. — States in 1959, from Screwworms were eradicated from the southeastern United States in 1959, from Puerto Rico in 1976 and they may be eliminated soon from the south-

western United States. "There were only two cases of screwworms found in the United States this past year," said James E. Novy, director of the U.S. Department of Agriculture's Screwworm Laboratory at Mission, Texas.

"This compares with 86 cases in 1979, 7,230 in 1978 and over 95,000 in 1972, the year with the highest number of reported cases," he said. "The two 1980 cases occurred in Texas in April and August. Both were 250 to 300 miles from the nearest known wild screwworm populations in Mexico."

Novy is a veterinarian with USDA's Animal and Plant Health Inspection Service.

Screwworm flies are native to the American tropics in Mexico and until last year in the United States, they migrate northward with warm weather in spring and summer.

"Larvae of this fly feed on live flesh in wounds of warm-blooded animals," Novy said. "Odors produced by feeding larvae attract more flies, which lay additional eggs. Repeated infestations, if left untreated, have killed cattle within ten days."

In 1972, the United States and Mexico agreed to jointly eradicate the pest from all parts of the continent north of Mexico's narrowest point, the 125-mile-wide Isthmus of Tehuantepec, he said.

"Most of northern

Mexico is now free of screwworms," Novy said. "However, there is continued reporting of a large number of cases about 250 miles south of the lower Rio Grande valley."

"Fly traps are maintained along the Rio Grande to find any wild screwworm flies that approach the border, but primary reliance for detecting screwworms lies with sample submission of all screwworm larvae found in wounds."

He said the basic tools for eradicating screwworms are production and serial release of millions of sterile male flies.

"Since females of this species usually mate only once in their lifetimes, any eggs produced after a mating with a sterile male will

not hatch," he said. "This breaks the life cycle."

Until late 1976, all sterile flies used in this eradication effort were produced in the APHIS Screwworm Plant at Mission. This facility is now producing about half its capacity — 100 million sterile flies per week — and is sending all the sterile flies to Tampico, Mexico, for packaging and distribution in Mexico, he said.

"As the eradication program moves farther south in Mexico during winter and spring, we expect sterile fly production at Mission to end," Novy said. "Then all sterile fly production will be done in Mexico."

The rest of the sterile flies are currently produced at a new facility near Tuxtla Gutierrez in southern Mexico, which can produce up to 500 million sterile flies per week.

As the eradication program moves farther south in Mexico during winter and spring, we expect sterile fly production at Mission to end, Novy said. Then all sterile fly production will be done in Mexico.

As the eradication program moves farther south in Mexico during winter and spring, we expect sterile fly production at Mission to end, Novy said. Then all sterile fly production will be done in Mexico.

As the eradication program moves farther south in Mexico during winter and spring, we expect sterile fly production at Mission to end, Novy said. Then all sterile fly production will be done in Mexico.

ADVANCE NOTICE THATCH MEADOW COMPLETE DISPERSAL

Located just off Rt. 6 at East Troy, Pa. Watch for auction arrows off Rt. 6 by Warner Co. Case Dealer.

Due to a heart operation we have decided to discontinue our farming operation and will sell the following on:

SATURDAY, FEBRUARY 21, 1981

70 REGISTERED & HIGH GRADE HOLSTEINS 70

5 tractors including A C 200 diesel w/only 1280 hrs nice; Oliver 1555 gas tractor w/hydro power only 2054 hrs nice & 40 other pieces of good farm equipment & numerous small items. Reserve this date for one of Bradford County's largest dispersals. You will find a good head of cattle & large line of like new & well cared for farm machinery. Watch for full listing.

THIS 260 ACRE FARM FOR SALE

Nice home, barn w/cement block basement and laminated rafter roof, 50 tie stall for cows, 15 hfr stalls & box stalls, 18 by 55 silo, bulk tank, barn cleaner, tool shed, corn cribs, large pond & springs, 200 acres tillable, nice long fields can be made into a show place. Just off hard road close to 2 parks, 4 miles from Troy. Very good producing farm Hay & Silage in barn stay w/farm, possession early spring, you must see to appreciate. Partial financing available to approved party. Contact owner after 8 P.M. 717-297-3160.

Owners
FRANK & LORRAINE DOMDROSKI

Sale Mgr. **GORDON WOOD**
Mansfield, Pa.
Phone 717-549-4901.

For the most in advertising coverage and preparing your sale call Woods Auction Service

Poultry waste helps corn grow

NEWARK, Del. — Farmers need to maximize yields and minimize cost outlays in order to grow profitable crops. Large amounts of poultry manure and solid waste are produced each year in this area. If growers could use these more effectively in crop production, would they be able to increase yields and reduce production costs?

Agonomist William H. Mitchell and soil chemist Donald L. Sparks of the University of Delaware's Agricultural Experiment Station have been investigating the possibility on field corn, and the results look very promising. Sparks reported on their findings during recent national agronomy and soil science meetings in Detroit, Michigan.

Five years ago Mitchell took a shredded, partially composted solid waste product consisting mainly of garbage, paper, and lawn and garden refuse and incorporated it into the soil in test plots at the university's research farm near Georgetown. Initially he wanted to see if this material would help reduce soil compaction in the sandy soils of lower Delaware.

A modified subsoiler was used to place the composted solid waste deep in the soil. Over 30 tons per acre were applied in four-inch vertical bands to a depth of 16 inches. Subsurface irrigation, poultry manure, and

lime-phosphorus treatments were included on some plots to see how they affected performance of the waste material.

Established in 1975, the plots treated with the composted municipal waste and manure are still producing 10 to 15 more bushels of corn per acre than untreated control plots.

Sparks analyzed soil samples from the treated plots to find out what accounts for the continuing effectiveness of the waste amendments. His tests show that though the waste product is still recognizable, its

physical and chemical compositions have changed. Each year the treated soil has become richer with roots and earthworm castings.

On irrigated plots, subsoiling and incorporation of solid wastes had little effect, they say. But on non-irrigated plots, the treatments have resulted in significant yield improvement.

This suggests that the principal benefit of the solid waste amendments is that they permit enlargement and deepening of the corn root system. This allows the plant to use water and nutrients more effectively.

New rapid analyses for fiber in foods

WASHINGTON, D.C. — The fiber content of foods can be measured quickly and accurately using near-infrared

reflectance analysis, according to Karl Norris, an agricultural engineer with USDA's Science and Education

Administration. Norris, who in 1963 developed NIR spectroscopy for the measurement of moisture content, explained at a meeting here today that NIR analysis can be used to determine the amount of fiber in grains and breakfast cereals.

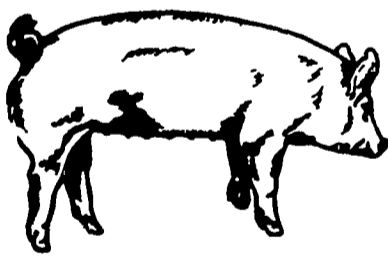
Speaking at the American Chemical Society's Middle Atlantic Regional Meeting, Norris said that near-infrared spectroscopy, used to identify starch, sugar, protein, water, and oil, can also be used to measure fiber in breakfast cereals. Fiber measurements can also be made on animal feeds, grains, and forages.

The NIR analysis takes only 20 seconds compared to 24 hours for the neutral-detergent methods currently recommended by the Association of Official Analytical Chemists.

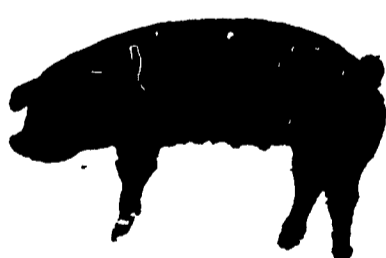
The NIR analysis is clean, easy to perform, and non-destructive—therefore the same sample can be checked repeatedly. By contrast, neutral-detergent analysis involves the use of hazardous chemicals, requires trained personnel, and completely breaks down the sample being tested.

Lawrence, Leon and Thomas Arnold 17th PRODUCTION SALE

Yorkshires



Durocs



AUCTIONEER, Harry Bachman, Annville, Pa.

★ **50 BRED GILTS**
(All gilts are hand mated)
Due March & April —
Pick due dates to fit your farrowing schedule

★ **40 BOARS**
(Ready for heavy service)
25 Yorkshire, 15 Duroc 7 to 8 months old Ready for Heavy Service Feed efficiency & test station information

★ **40-50 OPEN GILTS**
(Ready to breed)
Yorkshire, Duroc crossbred All animals vaccinated for Erysipelas & Lepto Negative tested for Brucellosis & Pseudorabies

Saturday Afternoon, February 28, 1981 1:00 P.M.
Sale To Be Held At The **LEBANON AREA FAIR GROUNDS**
Cornwall & Evergreen Roads, 1½ Miles South Of **LEBANON, PA**

Size	Price	Buyer
Lot 525 - Top Choice	\$380...	David Glass, Birdsboro, PA
Lot 524 - Explorer	310...	Richard Leiberman, Pen Argyl, PA
Lot 525 - Hustle	450...	Wayne G. Strite, Chambersburg, PA
Lot 527 - Top Choice	410...	Kevin Brown, Klingerstown, PA
Lot 528 - Explorer	380...	Quinton Hackett, Elmer, NJ
Lot 530 - Explorer	260...	Catellinn Farms, Rexville, NY

THANK YOU TO BUYERS OF OUR YORKSHIRE BRED GILTS AT PA FARM SHOW 1981

Visit With Us At Our Booth At The **KEYSTONE PORK CONGRESS**
February 19
Host Corral,
Lancaster, PA

CATALOGS
AVAILABLE
FEBRUARY
15

WRITE
OR
CALL

LEON L. ARNOLD
RD 7, Box 705, Lebanon, PA 17042
Phone: (717) 273-5880

Kennedy Complete Dispersal

Located off Rt. 549 on Bailey Creek Rd., 7 miles from Mansfield, Pa., 3 miles from Roseville, 20 from Elmira, NY. Watch for auction arrows off Rt. 549.

Tuesday, January 27, 1981
At 1:00 Sharp

45 - Head of Cattle - 45

40 Holsteins - 4 Ayrshire - 1 Jersey
45 mature cows, interstate tested, preg. exam., charts day of sale.

Machinery

I.H.C. 966 diesel tractor w/wide front; Oliver 1365 diesel tractor w/wide front & loader; N.H. 310 baler used 1 season like new; N.H. super 717 chopper w/1 row Corn head; N.H. 469 haybine; Oliver 20' 283 transport harrows; I.H.C. 4 bottom reset plows; 2 hay wagons w/kicker racks used 1 season; Ford 2 row 3 pt. hitch corn planter; 2 Grove self unloading boxes & running gears; J.D. 640 side rake; New Idea flail spreader; N.H. 362 barrel spreader; skelton elev. w/motor; Surge 15000 KW generator.

Sale Mgr. Note: The cows are a little on the thin side have had very little grain & no silage, but most of them are the kind that will produce well with grain & good roughage, 20 cows handling calves.

Terms - Cash or Good check.
Lunch Available Sale Under Cover

WILLIAM (Bill) & ROBERTA KENNEDY

Auctioneer - Arlow Kiehl
Sale Mgr. **GORDON WOOD**
Mansfield, PA 717-549-4901

For the most in advertising coverage & preparing your sale, call Woods Auction Service.