

Clean And Store Spraying Equipment

UNIVERSITY PARK (Centre) — Cleaning and winterizing spraying equipment are important to prevent corrosion, cross contamination of pesticides, crop injury and to prolong the life of the equipment. Don Daum, Penn State ag engineer, offers the following recommendations.

The last washing of sprayers for the season should be very thorough. A sudsy detergent solution (¼ pound powder or equivalent liquid per 25 gallons of water) will clean sprayers of many pesticides, especially insecticides and fungicides. However, herbicides, especially hormone herbicides, are very difficult to remove and require other cleaning agents. Salt or amine formulations of herbicides can usually be neutralized by household ammonia (one quart per 25 gallons) or removed with trisodium phosphate (TSP) (two pounds per 25 gallons) or finely ground activated charcoal (½ pound) and detergent (½ cup per 25 gallons). Ester formulations are very difficult to remove and may even be absorbed by the sprayer hoses; one recommendation is to

use a combination of washing soda (one pound), kerosene (one gallon) and detergent (¼ pound per 25 gallons). Be sure to rinse all cleaning solution from the sprayer and completely drain. You can never be sure that all traces of pesticide are removed from application equipment. However, a thorough washing and repeated rinsings will greatly reduce the amount remaining.

In addition to cleaning before storage, all parts of the sprayer, especially the pump, must be protected from corrosion and damage. One approach is to completely drain the entire sprayer system, even if it means partial disassembly. Blow air through the system or leave it open to dry; otherwise parts may corrode or water may collect in low places and cause freeze damage. A better method is to add automotive antifreeze solution to the sprayer. This provides protection from freezing as well as corrosion. If the sprayer has no rubber parts, used engine oil may be used in place of antifreeze mix. Or fruit growers may want to add dormant oil, since that will be the

first spray next spring; just add proper amount of water and spray. Whatever you use, run the sprayer until the liquid is spraying from the nozzles to ensure all parts of the sprayer are protected. If you just drain the sprayer, you should at least put antifreeze or oil in the pump.

If the sprayer has an engine, additional servicing is required. Follow the recommendations in the operator's manual. Clean the

outside of the engine, especially the cooling fins on an air-cooled engine. Completely drain or add antifreeze to the cooling systems of water-cooled engines. Service or replace the air cleaner. Rust-preventive oil can be added to the cylinders to protect the interior of the engine during storage. Drain the fuel system or add a fuel stabilizer.

Before storage, check the

sprayer for worn or damaged nozzle tips, cracked hoses, damaged screens, weak clamps, inaccurate or broken pressure gauge, worn pump and drive, or any other part that may need replacement. Order now so you can rebuild the sprayer this winter and be ready when spraying season starts again next year. Your sprayer is an important tool and it deserves proper care.

Simmental Association Meeting Schedule Set

BOZEMAN, MT — The American Simmental Association has finalized its schedule of national meetings for 1989.

ASA's 21st Annual Meeting and Convention will be held in Little Rock, AK, February 19-21, with the Excelsior Hotel serving as Convention Headquarters. The Arkansas Simmental Association is planning a cattle sale in conjunction with the Convention.

"Summer Classic IX," the highlight of the ASA junior membership year, will be conducted in Des Moines, Iowa, during the

week of July 10-14. The event will utilize the Iowa State Fairgrounds for cattle activities, with support provided by the Iowa Simmental Association and Animal Science faculty from Iowa State University.

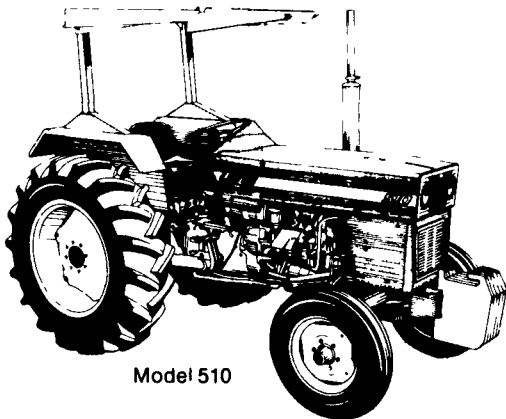
The Association's 15th Annual Summer Conference will be held July 20-22 in Lansing, MI, with

the Radisson Hotel serving as Conference Headquarters. The Michigan Ag Expo, sponsored by Michigan State University, will be held concurrently in Lansing.

ASA's 22nd Annual Meeting and Convention will be held in Washington, D.C. with a Convention hotel and final dates yet to be determined.



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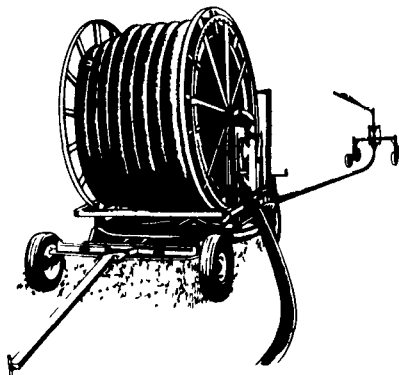
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