

Farm Business News



Tri-Town Steady Spinner, bred by J.Z. Nolt, of Leola, has entered the young sire sampling program of Atlantic Breeders Cooperative.

Nolt bull enters Atlantic program

LANCASTER — Atlantic Breeders Cooperative has selected Tri-Town Steady Spinner to enter the young sire sampling program for 1981. He is one of 40 Holstein bulls to enter the program this year. Bred by J.Z. Nolt, Leola, the bull will be known as 15H398 Steady.

During sampling, Steady will be randomly mated to approximately 600 Holstein cows through artificial insemination service in herds owned by Atlantic members. He will remain at Lancaster headquarters barns for the next four years as he continues to grow and await evaluation of his progeny. If the results prove satisfactory, Steady will then go into extensive service throughout the Cooperative's 12,000-member

area and his semen may be marketed to other parts of the world.

The bloodlines in this young bull's pedigree are specially selected for Atlantic's breeding program. His sire, S-W-D Valiant is scored "Excellent" in body conformation and received the Gold Medal Sire award from the Holstein Association last year.

His dam, Tri-Town Gay Joan, is scored "Very Good" in body conformation in the Nolt herd and has two records over 21,500 pounds of milk and 800 pounds of butterfat. Joan's sire, Harrisburg Gay Ideal, is a popular bull in the Atlantic stud. Her dam is also "very good" and has several high production records.

Sorghums show how seed research continues

DEKALB, Ill. — Estimates place the number of crop species grown commercially in the U.S. at nearly 1,000. Only a few of these are native to the country. Most originated elsewhere and were introduced by Indian tribes moving from the south, by colonists who brought seed of their own crops, by plant explorers and diplomats, and by individual entrepreneurs who sought to fulfill a desire for something new and different.

Some of the introductions proved to be woefully unadapted. Others escaped from cultivation and became serious weed pests. Most, however, filled a need and have found a place in America.

Among the introductions proven to be very important to U.S. agriculture are the sorghums, none of which are native here. Sorghum types grown in the U.S. fall into four utilization groups:

— Grain sorghum — generally a dwarf type suitable for combine harvest. Grown for grain but can be used to make high energy silage.

— Forage sorghum — generally a tall-growing type harvested primarily for silage, or, sometimes, as dry bundle feed. May or may not have sweet juice.

— Grassy sorghum — fine stemmed and fine leaved types that are used primarily for grazing but may be harvested and used as green chop, silage or hay.

— Sweet sorghum — tall growing types that produce high quantities of sweet juice. Some forage types

are sweet. Used for production of syrup for cooking use and now receiving considerable attention as a biomass crop useful for alcohol production.

There are also some weedy types of introduced sorghum that have escaped and become established as serious pests. Included are johnsongrass, shattercane, Sorghum alum and various crosses involving one or more of these.

Public breeders have conducted most of the limited research directed to improvement of the sweet varieties. Private or commercial breeding teams do most of the research on the other three types, with F-1 hybrids dominating the market in each case.

DeKalb AgResearch, Inc. initiated hybrid sorghum research in 1949 and made the world's first commercial hybrid sorghum seed available to farmers in 1956. The first hybrids were grain type, followed shortly by forage and the first grass type hybrids. Sorghum hybrids were quickly accepted by U.S. farmers, and by 1960 over 90 percent of the grain sorghum acreage was planted to hybrids.

Until recently, sorghum was considered relatively free of serious disease and insect pests. Sorghum research teams have made significant improvements in resistance to such diseases as the smuts, downy mildew, maize dwarf mosaic virus, anthracnose and stalk rots caused by various fungi.

Insects of greatest importance include greenbugs, sorghum

midge and chinch bugs. A success story illustrating the way industrial research can respond to a problem concerns greenbugs, which were first noted to cause economic damage to sorghum in 1968. Sorghum greenbug resistance, first discovered in agronomically undesirable types by research workers of the Kansas Agricultural Experiment Station, was incorporated into parent lines and resultant resistant hybrids were first offered in 1975.

Most of the industry followed this lead and at present, a high percentage of all grain sorghum hybrids carry this or similar sources of resistance to sorghum greenbugs. More recently, forage and grass type sorghums with this type of greenbug resistance have become available.

In 1980, a new form of greenbug (biotype E) was found to be able to successfully attack the previously resistant hybrids. Prompt screening of available breeding material identified a few promising parents that DeKalb is using to produce experimental sorghum hybrids which should withstand biotype E greenbug infestation.

Seed research effort in the United States is diverse and dynamic. It operates relatively free of government regulation and is able to respond quickly to changes in consumer preferences and needs. Commercial research teams are in a position to respond efficiently and well

WASHINGTON, D.C. — Future world food demands could be seriously threatened unless reforms are made in the patent protection system for pesticides, a top official for the agricultural chemicals industry warned.

"The federal regulatory review process for new pesticides has caused an unforeseen erosion of the patent system," said Nicholas L. Reding, chairman of the Board of Directors of the National Agricultural Chemicals Association and Group Vice President and Managing Director, Monsanto Agricultural Products Company, St. Louis, Mo.

Reding, testifying on behalf of NACA before the Senate Judiciary Committee on the Patent Term Restoration Act (S. 255), told the panel that from five to seven years of patent life are lost under the current federal pesticide registration process.

This unchecked erosion of patent protection, he added, serves as a disincentive to continued industry innovation that will be needed to meet rising worldwide food demands.

"Most of the increases in food required to meet the projected increases in demand over the remainder of this century must come from raising the productivity of land already in cultivation," Reding said. "Achieving significant increases in land productivity requires capital input and use of technology on a massive scale."

Reding said, however, that without adequate patent protection, the industry cannot continue to undertake the massive research involved in discovering and developing new pesticide products. "When protection is devalued," he said, "much of the incentive to invest long-term, high-risk capital in innovative pesticide research goes with it."

Reding noted pesticide patent

holders have only the remaining time of the 17-year patent life following the 5 to 7-year registration process to recoup their invested capital, develop market strategies, prepare environmental compliance procedures, regain all other costs and realize a profit.

Passage of the Patent Term Restoration Act, Reding told the Committee, would help restore a portion of the patent rights lost to

the registration process and would be an important first step in maintaining the incentive needed for pesticide research and development.

NACA is a non-profit, Washington-based trade organization whose 115 members make and formulate virtually all the crop protection chemicals used in the United States and a large percentage used abroad.

Timely tips:

Getting your baler ready

LANCASTER — Haying season is just around the corner and it's important for your baler to be in tip-top shape when that first cutting is ready to be taken off.

Some timely routine maintenance checks and a thorough cleaning will help insure that this basic farm implement will be set to move into the fields and remain in good operational condition throughout the long upcoming season, according to service experts at Sperry New Holland dealerships.

First, examine the P.T.O. shaft at the drive area and check for worn universal joints. Make certain the sliding members move freely and are well-lubricated.

Next, move on to the P.T.O. slip clutch. Disassembly will show any worn or rusty discs. When reassembling, refer to the slip clutch setting in the operator's manual.

On engine-equipped balers, thoroughly clean the exterior of the engine paying close attention to cooling fins on air-cooled engines and radiators on liquid-cooled. Replace the crackcase oil and the oil filter and service the air cleaner. Check the drive belts for cracks and replace where necessary, using the manual as a guide.

Another area of vital preventive maintenance centers on the baler chains. They should be kept oiled during the off-season and lubricated on a daily basis when in use. Always check for alignment and adjustment.

When a chain becomes stretched to the point where all idler adjustment is used, it's time to install a new chain to prevent excessive

wear and replacement of sprockets.

In the baler pick-up area, replace any bent or missing fingers, straighten or replace damaged guards and check the weight on the pick-up wheel. Also loosen the spring tension on the pick-up slip clutch. Disassemble and check for worn or rusty discs or plates. Reassemble and set at the tension prescribed in the manual.

Moving on to the feeder area, check and adjust the bearing clearances on the feeder carriage, feeder bar and tracks. Replace any broken or bent feeder fingers.

Sharp knives are important for the formation of good bales. Remove and sharpen both the plunger and stationary knives. Shims are used to align the knives. Make certain they are returned to original locations after sharpening, using the manual for guidance.

It's a good idea to check the knottor-twister area for grooves and replace worn parts as required. For a wire-tie machine, examine the rollers and guides on the underside of the bale case and remove any accumulation of hay or rust. Coat the inside of the bale case to prevent further rusting.

For general maintenance, keep the baler properly lubricated. Make certain all fittings take grease, even if removal is required to clean an accumulation of hardened dust or grease. Drain and refill all gearboxes.

The baler's hydraformatic system should be serviced only as recommended in the operator's manual.

WHAT'S NEW Water brochure offered

CONRAD, Ia. — Ritchie Livestock Fountains is offering a livestock watering brochure to producers to help plan, install, and maintain quality livestock watering systems.

The brochure gives maintenance and management information to help producers get maximum use from watering systems for increased livestock performance. The brochure addresses water needs for beef cattle, dairy, and swine operations.

Water quality and temperature are stressed for optimum water consumption and weight gains by livestock. Also, characteristics of a good waterer are given analyzing thermostatic temperature control, construction, proper heating elements, and waterer cleaning.

For your copy of "Ritchie Fountains-How to Use Water to Boost Profits", contact Ritchie Livestock Fountains, 120 South Main, Conrad, IA 50621.



Brochure explaining livestock watering systems is available to producers for beef, dairy and swine operations.