

Four Wheat Hybrids Ready for Fall

Pioneer Hi-Bred International, Inc., today announced it will release four wheat hybrids for sale this fall, marking the company's first sale of hybrid wheat seed.

Edwin J. Mulder, president of Pioneer's Cereal Seed Division, told financial analysts that the company plans to produce more than 40,000 bushels of hybrid wheat for 1975 planting. The hard red winter wheats being released this fall are primarily adapted to Kansas, Oklahoma, and Texas.

"These hybrids and others we're producing for 1975 planting will, we believe, fulfill the expectations for hybrid wheat which have been talked about for more than 10 years," Mulder said. Limited marketings of seed this fall at approximately \$20 per bushel will help the company gauge farmer acceptance of hybrids and perfect its marketing plans.

Pioneer breeds and produces the largest selling brand of hybrid seed corn, and is also a leading developer of genetically

improved sorghum and soybean seeds, beef cattle and poultry. Its hybrid wheat breeding program is headquartered at Hutchinson, Kansas.

Dr. Charles Hayward, director of Pioneer cereal seed research, presented data showing significant yield advantages for hybrid wheat. The four hybrids being released for planting this fall averaged 19.1 per cent or 6.1 bushels higher in yield than the average of 8 check (comparison) varieties. The checks are all widely grown in the hard red winter wheat area.

In addition to having superior yielding ability, the hybrids also stand well. At the three test locations where conditions allowed measurement of standability, the four hybrids stood twice as well as the check varieties. Test weight (bushel weight) of the four new Pioneer releases compares favorably with the checks and they also have as good or better milling and baking qualities, Hayward pointed out.

"We are excited by the performance of these hybrids because they prove that hybrid vigor does exist in wheat," Hayward said. "We could have released some hybrids sooner, but we decided to wait until we developed improved male sterile and restorer lines. It now appears we made the right decision."

The seed industry started major research on hybrid wheat in 1961. In order to produce hybrids on a field scale, breeders had to develop male sterile and restorer lines of wheat. Male sterility causes only the female part of the plant to function. Thus, male sterile lines serve as the females for hybrid seed production; the male or restorer lines fertilize the female. They also restore pollen-producing ability to the seed produced on the female.

Some of the first hybrids yielded less than varieties and had tall, weak straw and unsatisfactory milling and baking qualities, Hayward told analysts. This was probably due to the limited number of restorer and male sterile lines available, many of which lacked necessary performance factors.

The 1973-74 Pioneer tests which Hayward cited were made at 13 locations scattered throughout the hard red winter wheat area. Either three or four replications (duplicate plantings) of each hybrid were made at each location.

The Pioneer testing program is being further expanded this coming year, Hayward said, to provide even more performance data to add to the 1973 and 1974 figures. Thus, up to three years of data will stand behind hybrids offered in volume in the fall of 1975. Three hundred new hybrids will be tested in 1974-75, many involving promising new male restorer lines never before tested in hybrids. Two hundred hybrids were tested in 1974.

Growers wanting the advantages of hybrid wheat must purchase seed for each crop from the breeder-producer. If grain produced by a hybrid is planted the following year, yields will drop sharply due to the loss of hybrid vigor. The same holds true for hybrid corn and grain sorghum, which have completely replaced conventional open-pollinated varieties.

Marketplace Fair at E-Town Sept. 18

Elizabethtown Jaycees would like to invite all residents of Lancaster, Dauphin, York, & Lebanon to participate in the Marketplace Fair. The fair is being held in conjunction with the Annual Jaycee Festival on September 18-21.

Competitions will be held in six divisions of the Pennsylvania State Farm Fair Premium Booklet, grains & vegetables, fruits, home & dairy products, floral exhibits, youth exhibits, domestic & fine arts. All judging will be done according to the rules of the State Farm Fair Booklet. The judges for the competitions will be from the Pennsylvania State Extension Office, Lancaster County and are Mrs. Doris Thomas of the Home Economy Department and Mr. Arnie Lueck, Associate County Agent.

All entries must be in no later than 7:00 P.M. Wed-

nesday, September 18. Entry forms will be accepted anytime prior. Entry forms can be obtained from any Elizabethtown Jaycee, Zarfoss Hardware, Lemar Jewelers, other area merchants, or by calling Gary Myer at 717-367-2055, after 6:00 P.M. All entries, except perishables, will be held at the Fair on display until Saturday evening. There will be an auction Thursday night of the prize winning cakes, pies and pastries. All articles will be sold only with the permission of the exhibitor. Any proceeds from the sale of an article will go to the exhibitor. All non-perishable items will be exhibited in the Main Tent until Saturday evening, at which time they may be picked up. There will be 24 hour protection for the exhibits throughout the entire festival. In addition the Elizabethtown Borough Police will provide regular patrols of the area.

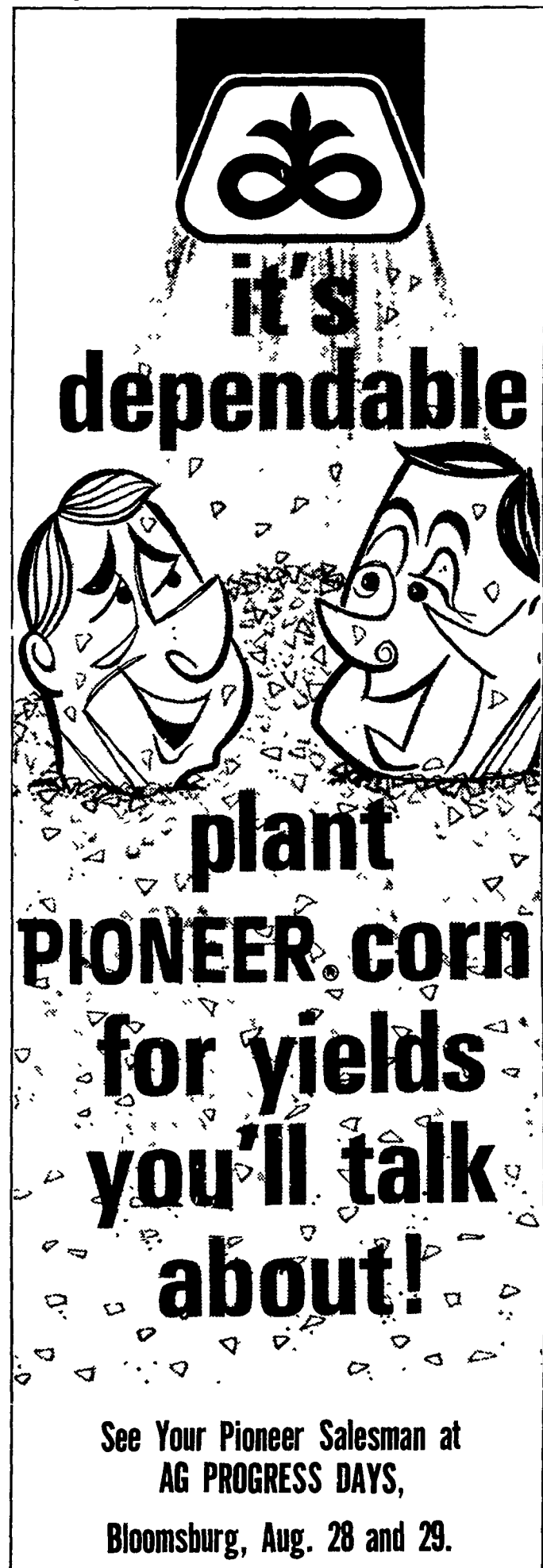
New Breed Cattle Sale Set Oct. 15

There will be a "classic" opportunity for cattlemen who want to expand their herds with progeny of top Simmental, Maine-Anjou, and Chianina bulls. The Midwest-New Breeds Classic Sale, jointly sponsored by Midwest Breeders' Cooperative and New Breeds Industries, will be held at the AK-SARBEN Sale Pavilion, Omaha, Nebraska, on October 15, 1974 at 1:00 p.m.

Robert Fincham, Beef Director of Midwest Breeders' Cooperative, and Ancel Armstrong, General Manager of New Breeds Industries, in announcing the sale, pointed out that the primary objective of the

Midwest-New Breeds Classic Sale is to provide an opportunity for Midwest Breeders to make available outstanding cattle that can be purchased to establish new herds of these great cattle or to expand existing herds. Approximately 50 lots of each of the three breeds will be offered. These will consist primarily of half-blood heifers. Also, some pens of 3 to 5 head will be offered.

Sale catalogs are available, upon request, from the following address: Attention: Customer Services, N.B.I., Box 959, Manhattan, Kansas 66502.



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