Nova 66 is a short-season, smooth-hulled, high-yielding, medium-grain variety released for general production in Arkansas. It is very similar to Nova in most characteristics but has slightly shorter straw and matures about a day later, on the average.

Nova 66 was evaluated in regional uniform tests, beginning in 1961, by the Crops Research Division and cooperating agricultural experiment stations in Arkansas, Louisiana, Mississippi, and Texas. It was tested extensively in Arkansas during the period 1961 through 1965. In 31 replicated tests in which differential lodging occurred, Nova 66 showed much stiffer straw than Nova and considerably stiffer straw than Nato, the leading medium-grain variety. Under conditions of very severe lodging, Nova 66 usually has lodged about 20 to 25 cm above the ground and still could be combine-harvested readily. In contrast, 'Nato' has lodged near the soil surface, making combine harvesting much slower and more difficult.

In order to obtain the full benefit from the lodging resistance and high yielding potential of Nova 66, use of the proper rate and timing of midseason application of nitrogen is very important. The combination of highest grain yield, near minimum plant height, and minimum lodging, was obtained when half of the topdress nitrogen was applied just prior to first flood, and half at about 67 days after seedling emergence when about half of the longest internodes of the main culms measured 25 to 40 mm.

Nova 66, like Nova, shows a high degree of field resistance to rotton-neck blast (Piricularia oryzae Cav.) in Arkansas but may be damaged by a race of the blast fungus which is present in Louisiana and Texas. In the absence of blast, Nova 66 has performed very well in Louisiana and Texas tests. Nova 66 is moderately resistant to straighthead and is resistant to hoja blanca.

Numerous detailed cooperative evaluation tests indicate that Nova 66 is very similar to Nova, Nato, and Saturn in processing and cooking characteristics. Nova 66 may require more care in handling and drying than Nato in order to obtain maximum head rice (milling) yields.

Nova 66 was developed cooperatively by the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture and the Arkansas Agricultural Experiment Station. Foundation seed of Nova 66 is a product of the cooperative varietal improvement program of the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture, the Arkansas Agricultural Experiment Station, and the Texas Rice Improvement Association.

REGISTRATION OF STARBONNET RICE
(Reg. No. 31)

T. H. Johnston, B. D. Webb, and K. O. Evans*

'SARBONNET' rice (Oryza sativa L.), C.I. 9584, Stg 604619, was selected in 1960 from the F_4 generation of a cross made at Stuttgart, Arkansas, in 1954 between 'Century Patna 231' (C. I. 8993) and 'Bluebonnet' (C. I. 8322).* The final selection was based on desirable agronomic type and acceptable long-grain-quality milled rice. Starbonnet is a midseason, short-strawed, high-yielding, long-grain variety that was developed and released cooperatively by the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture and the Arkansas Agricultural Experiment Station.

The combination of highest grain yield, near minimum plant height, and minimized lodging, was obtained when half of the internodes of the main culms measured 25 to 40 mm.

Starbonnet was evaluated in uniform regional tests beginning in Arkansas in 1961, by the Crops Research Division and cooperating experiment stations in Arkansas, Louisiana, Mississippi, and Texas. Foundation seed of Starbonnet was distributed from the University of Arkansas Rice Branch Experiment Station, Stuttgart, in 1967.

Compared to 'Bluebonnet 50' growing under the same conditions, plants of Starbonnet appear to produce fewer and shorter leaves; average size is heading; produce panicles that are more drooping; have culms (stems) with consistent internodes at maturity so they average 15% and are much more resistant to lodging.

Hulls (lemma and palea) of Starbonnet are straw-colored with faint purple tips (apices), awnless. Under conditions highly favorable for growth, short awns may be produced on the panicles. Grains of Starbonnet are more than those of Bluebonnet 50.

Starbonnet has produced considerably higher head and head rice yields than Bluebonnet 50, the principal variety now grown in Arkansas. Based on 26 replicated tests in Arkansas during the period 1961 through 1966, the estimated per-acre value of Starbonnet was 9% greater than from Bluebonnet 50.

Starbonnet is very similar to Bluebonnet 50 in many characteristics.

Numerous cooperative tests conducted at the Quality Laboratory at Beaumont, Texas, indicate that Starbonnet has cooking and processing characteristics similar to those of Bluebonnet 50.

Breeder and foundation seed of Starbonnet was released at the University of Arkansas Rice Branch Experiment Station, Stuttgart, Ark.

REGISTRATION OF BLUEBELL RICE
(Reg. No. 32)

C. N. Bollich, J. E. Scott, B. D. Webb,

'BLUEBELL' rice (Oryza sativa L.), C.I. 9214, B575A1-57-5, is a lodging-resistant, high-yielding, very-long-grain variety released by the Rice-Pasture Research and Extension Center, Beaumont, Texas, in the spring of 1966. It is a product of the cooperative varietal improvement program of the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture, the Texas Rice Improvement Association, the Texas Agricultural Experimentation Station, and the Texas Rice Improvement Association. It was developed by H. M. Beachell from the cross ('Century Patna 231' x C.I. 9122) made at the University of Arkansas in 1965. Bluebell was released about 1 week later than Bluebonnet 50.

Bluebelle grains are similar to those of Bluebonnet 50 but are larger in all three dimensions than those of Bluebonnet 50. The hulls are gold-colored, glabrous, and have a faint anthocyanin pigmentation in the eyes. Plants are shorter, sturdier, and of a darker green color than those of Belle Patna and the leaves are much shorter. Bluebelle matures about 1 week later than Bluebonnet 50.

Bluebelle is superior to Belle Patna and Bluebonnet 50 in resistance to lodging and in yielding ability. It performed very well in Louisiana and Texas tests. It was tested extensively in Arkansas during the period 1961 through 1965. In 31 replicated tests in which different lodging occurred, Bluebelle showed much stiffer straw than Bluebonnet 50. The final selection was based on desirable agronomic type and acceptable long-grain-quality milled rice. Bluebelle is a midseason, short-strawed, high-yielding, long-grain variety that was developed and released cooperatively by the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture and the Arkansas Agricultural Experiment Station.