REGISTRATION OF McNAIR 701 WHEAT
(Reg. No. 529)
G. K. Middleton, J. R. Bennett, and H. Calvin Newton, Jr.

`McNair 701' wheat (Triticum aestivum L. em. Thell.), C. I. 15298, is a soft red winter wheat selected from McNair 2203, C. I. 15228, which came from the cross 'Redcoat' sib/"Norin-10'/
'Brevor'//6/'Seneca'//5/'Asosan'//3/'Supreza'//"Chancel-
lor'//4/'Transfer,' the final cross having been made at the Vir-
ginia Agricultural Experimental Station. McNair 2203 has shown good resistance to leaf rust but proved to be segregating for susceptibility to powdery mildew. McNair 701 consists of a composite of seven apparently identical lines to be segregating for susceptibility to powdery mildew. McNair 701 is susceptible to Septoria nodorum and to stem rust.

This variety is best adapted to the coastal plain, east and north, through the Delmarva Peninsula. It will be useful also in the upland areas of the southeastern states. It is one of the earliest varieties being tested in the southeastern states and matures 6 to 8 days earlier than 'Blueboy,' the variety most widely grown.

In McNair tests in the coastal plain of North Carolina during 1971, 1972, McNair 701 averaged 3662 kg/ha (54.5 bu/acre) compared to 3558 kg/ha (53.8 bu/acre) for McNair 2203 and 3689 kg/ha (54.9 bu/acre) for Blueboy. In five Official Variety Tests in the coastal plain of North Carolina in 1971 and 1972, the average yields for these three varieties were as follows: 3024 kg/ha (45.0 bu/acre), 3145 kg/ha (46.8 bu/acre), and 2271 kg/ha (33.8 bu/acre), respectively. In five tests in the Georgia-Florida area in 1971, average yields for the same three varieties were 3548 kg/ha (52.9 bu/acre), 3662 kg/ha (54.5 bu/acre), and 3494 kg/ha (52.0 bu/acre), respectively. In the Uniform Southern Nurseries in 1971 McNair 701 ranked seventh among 17 varieties tested. Its yield was slightly higher than that of McNair 2203 and Blueboy.

The morphological characteristics of McNair 701 are as follows: winter growth habit — early season, midtall; stem — white, midstrong; spike — awnletted, oblong, middense; glumes — brown, midlong, midwide; shoulder — midwide, shape, wanting to oblique; beaks — midwide acute, short; awns — 5 to 30 mm; kernels — red, midlong, soft, ovate to elliptical.

Breeder seed will be maintained by the McNair Seed Company, Laurinburg, North Carolina. Seed stock will be maintained by the growing of head-rows which will be rogued of any off-types and followed by 12 foot or longer rows the second year. These will be rogued and then bulked as elite seed. Increases from this will be breeder, foundation, registered, and certified seed.

REGISTRATION OF NICOMA WHEAT
(Reg. No. 531)

` Nicoma' a hard red winter wheat (Triticum aestivum L. em. Thell.), C. I. 13874, OK 62514, was developed by the Oklahoma Agricultural Experiment Station and released in 1971. Nicoma originated as an F₃ head selection from a cross between 'Triumph' and 'Blueboy.' The cross was made in 1954 to combine the early maturity and yield stability of Triumph with the strong gluten properties of C.I. 12406. Triumph is a widely grown, early-maturing variety and a soft-gluten type. The other parent, C.I. 12406, is an unreleased Kansas experimental strain derived from the cross 'Marquillo'/'Oro'/'Oro'/'Tennmarq.' C.I. 12406 matures 7 to 10 days later than Triumph and has strong gluten properties.

Nicoma has a winter growth habit and early maturity, and is midtall in plant height. The stem is white and midstrong; the spike is awnless, fusiform to oblong, middense, and inclined; the glumes are glabrous, white (occasionally with black markings), midlong, and narrow; the shoulders are narrow and oblique to square (mostly square); the awns are white and 3 to 7 cm in length; the kernels are red, midlong, hard, and ovate; the

1 Registered by Crop Science Society of America. Received May 14, 1973.
2 Small grain breeder, former Research Assistant, and Small grain breeder, respectively. McNair Seed Company, Laurinburg, North Carolina 28352.

3 Registered by Crop Science Society of America. Received May 14, 1973.
4 Small grain breeder, former Research Assistant, and Small grain breeder, respectively. McNair Seed Company, Laurinburg, North Carolina 28352.

5 Registered by Crop Science Society of America. Journal Article 12604 of the Agricultural Experiment Station, Oklahoma State University, Stillwater, Oklahoma. Research conducted by the Departments of Agronomy, Biochemistry, and Botany and Plant Pathology. This research was supported in part by grants from the Oklahoma Wheat Research Foundation. Received July 2, 1973.
6 Professor, Associate Professor, and Assistant Professor of Agronomy, Professor of Biochemistry and Plant Pathology, respectively, Oklahoma State University, Stillwater, Oklahoma 74074.