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J Reeves. Register of cereal cultivars in Australia: wheat: Eradu. *J. Australian Institute of Agricultural Science* 47: 237 (1981)

Bred by: N. N. Roy and staff in co-operation with J. Reeves, H. M. Fisher, J. Parish and G. B. Crosbie (W.A. Department of Agriculture) also the Bread Research Institute (Sydney) and the University of Sydney.

Released by: W.A. Department of Agriculture.

J. Reeves

'Eradu'

Accepted for registration 29 September 1981

Parentage: Ciano/Gamenya

Characteristics
'Eradu' is quick maturing. The straw is normally strong and of medium height, about 8 cm shorter than 'Gamenya'. The head is white, tapering and bearded. The grain is white and soft.

Quality
The variety is considered to be a moderately good quality A.S.W. Desirable properties include better hectolitre weight, grain size and milling quality than 'Gamenya' but dough extensibility is similar. Grain hardness and dough strength appear somewhat unbalanced—it has softer grain, lower water absorption and stronger dough characteristics than 'Gamenya'. Nevertheless, on overall assessment it should be a useful component of an A.S.W. blend, particularly in areas where the percentage of hard wheat is increasing.

Yield
'Eradu' has been tested in comparison with 'Madden' in a total of 121 trials during the period 1974 to 1980. It generally outyields 'Madden'. Its main application is for the northern medium rain and the north central low rainfall areas, particularly for early sowing on loam soils. It has been approved for release as a replacement for 'Madden' in all northern areas where it is 6% higher yielding. Depending on further results it may also be suitable for release in the north central and central low rainfall areas.

Disease reactions
'Eradu' is resistant to stem rust. It probably has *Sr 5*, *Sr 8* plus other gene(s) from 'Ciano'. It is either moderately resistant or moderately susceptible to stripe rust, moderately susceptible to flag smut, susceptible to leaf rust and *septoria*. The rust testing was carried out by the University of Sydney as part of the National Rust Control Program.

Breeding
The cross (Ciano/Gamenya) was made in 1969. The early generations were grown by the single seed descent method in glasshouses at South Perth. The F_5 generation was then planted at Wongan Hills in 1971. Yield testing commenced in 1973, with quality testing a year later on a sample from the initial yield test.

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J. Reeves

'Harrier'

Accepted for registration 29 September 1981

Parentage: Norin 10 Brevor Selection 14/Kite Sib//Kite

Characteristics
'Harrier' is a bearded, free-threshing, short-statured wheat of late maturity. Of spring habit, its lateness appears to be due to a photoperiod rather than a cold requirement. The head is white with smooth glumes and persistent awns. The auricle is non-hairy. It produces a coarse straw which is a little shorter than that of the 'semi-dwarf' 'Condor'. It is taller, however, than 'Shortim'. 'Harrier' normally stands very well, but in common with other late-maturing varieties, the stem is liable to break near ground level and lodge under dry finishing conditions. It flowers and matures 9 and 5 days respectively later than 'Condor' at Temora.

Disease resistance
Tests by the National Rust Control Program at Castle Hill, N.S.W., have shown that 'Harrier' has resistance, conferred by *Sr 26*, to all known field strains of stem rust, and moderate resistance to leaf rust (adult plant), and stripe rust. It is resistant to flag smut, and susceptible to speckled leaf blotch.

Yield
The results of trials conducted by the New South Wales Department of Agriculture over the 5 years 1976 to 1980 inclusive have been used to compare the yields of 'Harrier' and three recommended cultivars to which it is similar in maturity. On average, 'Harrier' has been superior to 'Shortim' by 10% in 110 trials, situated mainly in northern and central New South Wales. It has been slightly better than 'Olympic', and about equal to 'Teal', in 93 and 102 trials respectively, conducted mainly in southern New South Wales. Rust damage was not a significant factor in the trials, but speckled leaf blotch would have affected some sites in the south.

Quality
'Harrier' has very similar quality characteristics to the cultivar 'Kite'. It is therefore considered to be suitable for