

GIZA 123, A NEW BARLEY VARIETY FOR THE NEWLY RECLAIMED AREAS IN EGYPT

BY

AHMED, I.A., A.S. EL-GAMAL, R.A. ABO-EL-ENIN, A.A. EL-SAYED, A.A. EL-HAG, A.M.O. EL-BAWAB, A.M. EL-SHERBINI, M.A. EL-MOSELHY, F.A. ASAAD, M.A. MEGAHEDE, K.A. MOUSTAFA, M.M. ABD EL-HAMED, M.M. MAHROUS, M.M. NOAMAN and R.A. RIZK*

Barley Res. Dept., Field Crops Res. Inst., Agric. Res. Center, Giza, Egypt.

** Plant Path. Res. Inst., Agric. Res. Center, ARC, Giza, Egypt

ABSTRACT

This study reports the development and characteristics of Giza 123, a superior new barley variety for the North Delta areas in Egypt. It was produced from a cross between the local variety Giza 117 and FAO 86 which was made in 1969/1970 season. In developing this variety, the standard variety CC 89 was compared with Line 289/53/2 (Giza 123) and 6 promising strains. For this purpose 15 yield trials (plot size 1/400 feddan) were conducted from 1984/1985 to 1987/1988. Moreover, a comparison between CC 89 and Line 289/53/2 were done using data of 37 yield trials from 1988/1989 to 1990/1991. Line 289/53/2 recorded 15.76 ardab/feddan and significantly outyielded CC 89 with an average increase of 2.63 ardab feddan, i.e., 20 %. The new variety combines the good characteristics of its parents which including high yielding ability, early maturity, moderate resistance to leaf rust. A specific molecular marker (B01-2000) was scored for identifying the new variety Giza 123. Certified seed of Giza 123 is available now to cover all the barley area in Egypt.