Differential performance of early maturing linseed cultures in rainfed situations

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SUMMARY
Linseed (Linum usitatissimum L.) is an important oilseed crop grown for both fibre and seed. In India, eighty per cent of the oil produced is used by industries in manufacturing of paints, varnishes, printing pads and inks, coating oils and in leather and soap. It is a source of complete protein (all 8 essential amino acids), complex carbohydrates, vitamins, minerals and natural source of Omega-3 (Alfa linolenic acid) and Omega-6 fatty acids. To evaluate and screen different elite cross derivatives under rainfed conditions, State Preliminary Yield Trials were conducted with Randomised Block Design with three replications during Rabi 2007-08 to 2010-11 at AICRP on Linseed, Jashipur, Odisha. Two high yielding early cross derivatives viz., OL 98-13-1 and OL 98-6-2 were evaluated in ten different coordinated testing centres of Zone III and Zone IV of the country during Rabi, 2011-12. The seed yield of OL 98-13-1 found promising among all the entries and ranged between 437 kg/ha to 1299 kg/ha with highest zonal average seed yield of 849 kg/ha in Zone IV. It recorded yield advantage of 15.20 per cent over the national check variety T-397, 39.41 per cent over the zonal check JLS-9, 14.11 per cent over NL 97 and 11.56 per cent over the best check variety Sharda. Both the entries matured earlier in 104-105 days as against 109 days in the national check T397. The entry was also found to be moderately resistant to wilt in artificial inoculums conditions tested in four testing centres of the country. The culture was found promising for yield and duration with resistant to wilt, moderate resistant to Alternaria blight and bud fly and highly resistant to powdery mildew. This culture can be used in further crop improvement programme suitable for utera and rainfed situations.

Key Words: Linseed, OL 98-13-1, Yield, Disease score

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