

156 x B14 were positive and highly significant at all five internode levels; these r values were: 0.7047<sup>+++</sup>, 0.6559<sup>+++</sup>, 0.6928<sup>+++</sup>, 0.6243<sup>+++</sup> and 0.6768<sup>+</sup>. On the other hand, in the hybrid 156 x N6 the r value was significant only at the second internode level (0.4464<sup>+++</sup>).

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Comparison of homozygous opaque-2, heterozygous and normal in hybrid 156 x B14 — We developed several heterozygous and homozygous opaque-2 hybrids and their normal analogues with the general formulae A x B, A x B o2 and A o2 x B o2. The yielding ability and other agronomic characteristics of the hybrid 156 x B14 and its two different opaque-2 forms are reported here.

One hundred plants of each hybrid were examined individually, and the data on the most important characteristics are presented in Table 1. It will be seen that the flowering time of the hybrids was practically the same; however, there was a significant difference in the earliness of normal and opaque forms as indicated by the moisture content at harvest. The moisture content of homozygous and heterozygous opaque was higher by 13.2% and 5.6%, respectively, than that of the normal analogue.

Table 1. Comparison of homozygous opaque-2, heterozygous and normal in hybrid 156 x B14.

Combinations	Days to 50% male flowering	Moisture content (%)	Shelling Percentage	Dry grain yield per plant (g)	1000-grain weight (g)	
					normal	opaque
156 x B14	83	30.2	83.5	203.0	294.9	-
156 x B14 <u>o2</u>	82	31.9	83.0	192.0	293.8	253.8
156 <u>o2</u> x B14 <u>o2</u>	82	34.2	81.1	182.7	-	249.2
L.S.D. 5%				6.4		
Percent of the normal hybrid						
156 x B14	100.0	100.0	100.0	100.0	100.0	-
156 x B14 <u>o2</u>	98.8	105.6	99.4	94.6	99.6	86.1
156 <u>o2</u> x B14 <u>o2</u>	98.8	113.2	97.1	90.0	-	84.5

The most important differences were found in the yielding ability of the hybrids. It can be seen in Table 1 that the dry grain yield of the heterozygous 156 x B14 o2 hybrid was nearer to the normal: the difference was 5.4%; the grain yield of 156 o2 x B14 o2 was 4.6% less than that of the heterozygous opaque hybrid and 10% less than that of the normal hybrid, a result of the joint effects of such agronomic characteristics as higher moisture content at harvest, lower kernel weight and poor shelling percentage.

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