

2. Trials of hybrids for grain and sugar.

Two tests were grown. The first field trial with 36 hybrids was raised at Pontevedra (Atlantic coast); the second trial with 9 hybrids was grown in Barcelona (Mediterranean coast). The highest yields of grain and dry matter in the juice are reported below:

Pontevedra:		(M)*	(P)*	(L)*
Experimental hybrid 5 =		11,450	653	30
Experimental hybrid 10 =		10,630	834	35

Barcelona:		(M)	(P)	(L)
Experimental hybrid 3		7,140	1,047	22
Experimental hybrid 10		6.950	1,366	24

*(M) = Kgs. of corn/Ha. at 15.5% moisture.

(P) = Kgs. of dry matter in the juice/Ha.

(L) = % of moisture at time of harvest.

Conditions that favor grain production also have a positive influence on dry matter content (sugar) in the juice, especially conditions which contribute to stalk constituents after grain maturation. The characteristics permitting a high grain production are not antagonistic to a favorable sugar metabolism in the stalk juices.