

1987

Acp4 Is the Most Distal Marker on Chromosome 1L

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Recommended Citation

Sisco, Paul H.; Wendel, Jonathan F.; and Stuber, Charles W., "Acp4 Is the Most Distal Marker on Chromosome 1L" (1987). *Botany Publication and Papers*. 16.

http://lib.dr.iastate.edu/bot_pubs/16

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Acp4 Is the Most Distal Marker on Chromosome 1L

Abstract

Table 1 shows data from 200 testcross progeny segregating for two morphological and two isozyme markers on chromosome 1L. We conclude that Acp4 is clearly distal to bm2, thus becoming the most distal marker mapped on 1L. Previous data on recombination between Dia2 and Acp4 (J.F. Wendel et al., MNL 60: 109-110) also suggest that Dia2 may be distal to bm2.

Keywords

morphological markers, isozyme markers, chromosome 1L, Acp4

Disciplines

Agronomy and Crop Sciences | Genetics | Plant Breeding and Genetics

Comments

This article is from *Maize Genetics Cooperation News Letter 61 (1987): 86*.

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Estimated map distances:

gs - 14.0 - Phi1 - 10.5 - bm2 - 15.5 - Acp4

[Table 1.](#)

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Table 1. Testcross data.Cross: gs, Phil-4, bm2, Acp4-2

x

gs, Phil-4, bm2, Acp4-2

+ , Phil-5, + , Acp4-5

	Parental Types	SCO region *			DCO regions *		
		1	2	3	1,2	1,3	2,3
n = 200	65	11	5	12	1	0	1
	59	14	13	17	1	1	0
TOTALS	124	25	18	29	2	1	1
Recombination % (SE)		14.0 (2.5)	10.5 (2.2)	15.5 (2.6)			

*Regions 1, 2, and 3 correspond to the segments gs,Phil, Phil,bm2, and bm2,Acp4 respectively. No triple crossovers were observed.