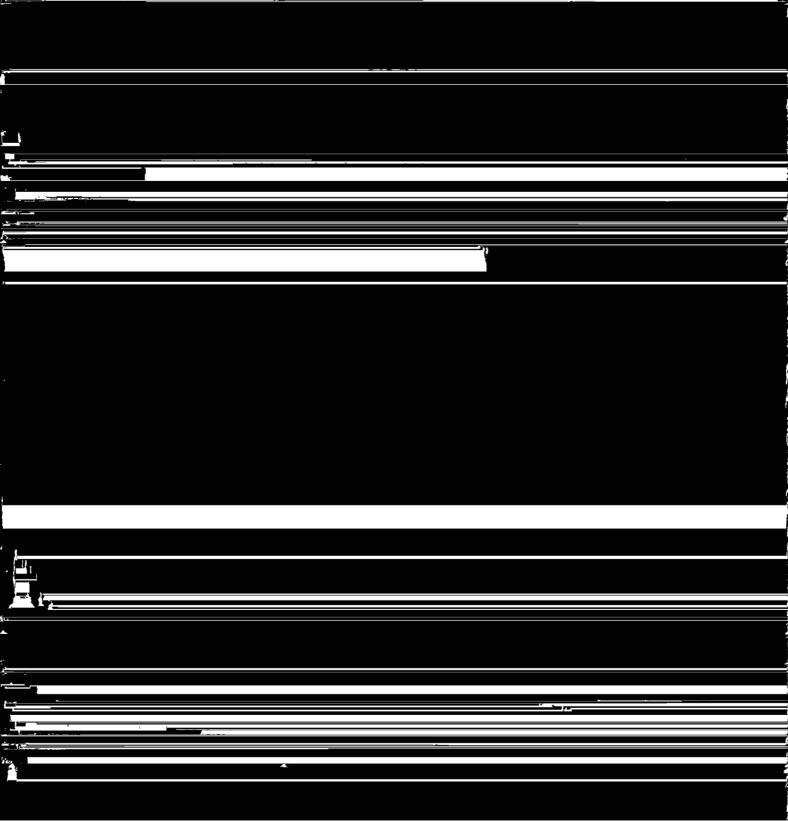
## Fine Mapping of Quantitative Trait Loci Using Selected Overlapping Recombinant Chromosomes, in an Interspecies Cross of Tomato

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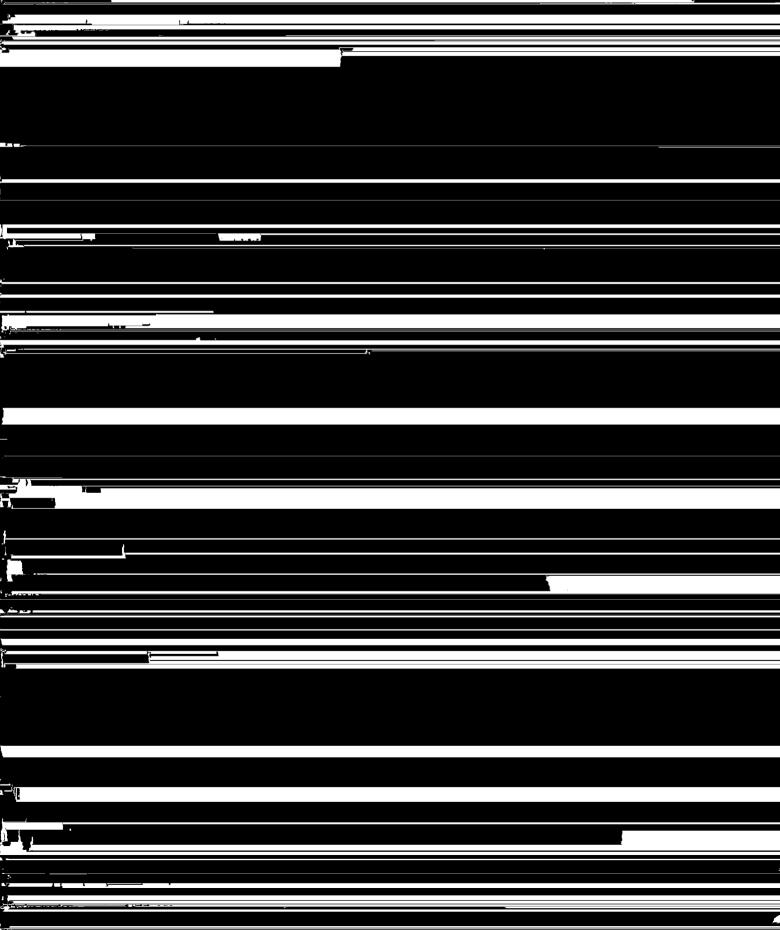
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previously found biparental (F<sub>2</sub>) transmission to yield a larger recombination fraction than paternal (BC)





of QTLs, in 5 genomic regions of *L. esculentum* × *L. chmielewskii* BC2F2.

(a) Effects at *TG19* linked to different chromosome 1 recombinants.

(b) Effects at *CD35* linked to different chromosome 2 recombinants.

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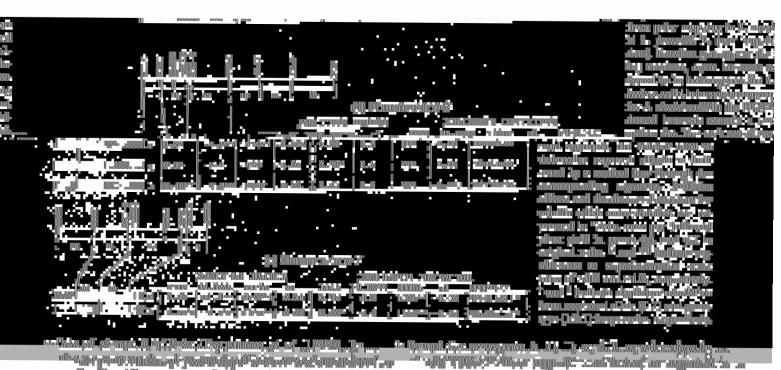
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	of heterozygotes might be increased by factor(s) near TG19, and pH might be increased by factor(s) between	significant additive eff (+0.46°Brix). Segment K	ect on soluble solids shows a significant domi-
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per fruit were significant interactions consistently more frequent than the random expectation of 5%. Single-locus additivity and dominance appear to ex-

SLEY and HEWITT 1988), will be important in assessing the role of epistasis in quantitative inheritance. However, both the current results and previous evidence

inbred strains (HALDANE and WADDINGTON, 1931; BURR et al. 1988), might permit one to determine orientation of markers as little as 1 cM apart. Physical mapping of genetic markers (COULSON et al. 1988; GANAL, YOUNG and TANKSLEY 1989), should improve resolution of both genetic maps and substitution map-

our CL chromosome 5, fewer flanking "preferred sites" would be present, and less shrinkage would be observed.

Recombination shrinkage may be particularly pronounced in wide crosses such as we have studied here, where greater sequence-divergence would result in

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