631

Plant & Animal Genome VII Conference

Town & Country Hotel, San Diego, CA, January 17-21, 1999.

P385

FINE MAPPING OF THE CHROMOSOME REGION AROUND A YELLOW RUST RESISTANCE GENE (Yr15) OF WHEAT

WENCHUN ZHOU[1], Tzion Fahima[2], Kulvinder S. Gill[1], Eviator Nevo[2]

[1] 371 PS Hall, University of NE-Lincoln, Lincoln, NE 68583-0915 USA
[2] Institute of Evolution, University of Haifa, Mount Carmel, Haifa 31905, Israel

Yellow rust/stripe rust is caused by rust pathogen *Puccinia striiformis* West. *Yr15*, a yellow rust resistance gene of wheat, was shown to be highly resistant to more than 20 stripe rust races from six countries. This gene was transferred from wild emmer wheat. *Triticum dicoccoides* G-25. The objective of our study was to develop a fine map of the chromosome region around *Yr15*. The plant materials used for the study consisted of G-25, a *T. durum Desf.* line susceptible to stripe rust (cv D447=LD393/2 Langdon ND58-322), and resistant BC_3F_8 lines (B1 and B2) and BC_3F_9 lines (B9 and B10). They are based on the introgression of *Yr15* into *T. durum* (D447), with selection for resistance and morphological similarity to the cultivar in each generation. B1, B2, B9, B10 and D447 are referred to as near-isogenic lines in this study. There is a major gene cluster present on the short arm of group 1 of wheat at FL 0.85. The gene cluster region probes were used to test the above 6 lines.

Return to Previous Page or Intl-PAG Homepage