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Poster Abstract - C.14

IDENTIFICATION AND MAPPING OF RESISTANCE LOCI TO *PYRENOPHORA* SPP DERIVED FROM *HORDEUM SPONTANEUM*

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Net blotch and leaf stripe caused by the fungi *Pyrenophora teres* Drechsler and *P. graminea* Ito & Kuribay respectively, represent serious threats to grain yield in barley (*Hordeum vulgare L.*). The wild progenitor of cultivated barley, *H. spontaneum* L. represents a useful source of resistance to various biotic stresses for the development of new resistant varieties. The evaluation of a *H. spontaneum* accession 41-1 to *P.graminea* and to *P. teres* demonstrated, respectively, full resistance and partial resistance to these disease. A medium-density, molecular marker map derived from a segreganting population of recombinant inbred lines (RILs) obtained from the cross between *Hordeum spontaneum* 41-1 x 'Arta' (susceptible) was available. The inoculation of one hundred and ninety four RILs with the two pathogens lead to the identification and mapping of QTLs involved in the resistances. PCR-based molecular markers linked to these loci were also developed in order to improve the mapping; these marker can also represent useful tools for the introgression of these resistant loci in susceptible barley cultivars by molecular marked assisted selection.