

Root-knot disease (*Meloidogyne graminicola*) predisposes barley (*Hordeum vulgare* L.) to leaf spot blotch/blight (*Bipolaris sorokiniana*)

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ABSTRACT: Barley (*Hordeum vulgare* L.) crop infected with *Meloidogyne graminicola* predisposed the infected plants to leaf spot blotch/blight (LSB). Such infected plants exhibited disease syndrome. At the seedling stage, plants had narrow nematode-to-root biomass ratios (NB: RB) revealed a high disease score and incidence of LSB over healthy plants irrespective of the varieties. The comparatively healthy plants (having few galls) had wider NB: RB ratios showed very low level of LSB incidence with mild disease score. At the adult growth stage, root knot infected plants exhibited further narrowing of NB : RB ratios and resulted in higher LSB score over comparatively healthy plants. The reduction in plant height was also reported. The present work emphasizes importance of nematode population management to minimize losses due to foliar diseases and knowing extent of nematode population prior to evaluation of the genotypes against such foliar diseases.

Key Words : Leaf spot blotch/blight, *Meloidogyne graminicola*, nematode-to-root biomass ratio, predisposition, Root knot disease of barley.