

## ***Pratylenchus neglectus* Common to the Canadian Prairies and a Parasite of Soybean and Chickpea**

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The current distribution and economic importance of plant-parasitic nematodes are relatively unknown in the Canadian Prairies. We aimed to fill this knowledge gap with a series of studies. First, 93 commercial fields of the Canadian Prairies were surveyed to establish plant-parasitic nematode abundances and distributions. Then, by molecular methods, the species of the most prominent genera in the survey were determined. Finally, we examined the host preference of *Pratylenchus neglectus* using growth chamber and microplot studies. In the growth chamber host study, seven of the most common crop species grown in the Prairies were challenged for three growth cycles (2 months each). In the microplot studies, soybean was grown in cylinders with soil naturally infested with *P. neglectus*, mixed to achieve four different starting densities. For results, *Pratylenchus*, *Paratylenchus* and *Quinisulcius* occurred in over 20% of fields with densities greater than 790 nematodes/kg soil. *Pratylenchus* was mainly *P. neglectus*, *Paratylenchus* was *P. projectus*, and *Quinisulcius* was *Q. capitatus*. *Pratylenchus neglectus* reproduced best on soybean, chickpea and canola, it maintained a steady population on pinto bean and spring wheat and severely declined on lentil and yellow pea. The microplot study confirmed that *P. neglectus* can reproduce on soybean. The results warrant host studies for *P. projectus* and *Q. capitatus* and variety studies of *P. neglectus* to soybean and chickpea.