**Understanding the role and delivery of *Pratylenchus penetrans* effectors proteins**

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Considered one of the most damaging species of root lesion nematodes (RLN), the plant parasitic nematode (PPN) *Pratylenchus penetrans* is a serious issue worldwide in crop protection and productivity of important agronomic and horticultural crops (e.g. potato, corn). As other PPN, *P. penetrans* secrete a repertoire of effectors, which once delivered either in the apoplast or inside cells, can trigger and manipulate in their benefit host cellular processes. Little is known about novel putative effectors specific of this RLN. From a comprehensive list of candidate effector genes of *P. penetrans* identified from mRNA-seq libraries of susceptible potato plants infected with this RLN, a sub-set of putative effectors were selected and studied in terms of putative role and *in planta* delivery using transient expression in *Nicotiana benthamiana*. Two putative effector genes (SP-42 and SP-60) were fused into pK7FWG2.0 and pK7GWF2.0 eGFP binary vectors and transformed into *Agrobacterium tumefaciens* GV3101. Leaves of *N. benthamiana* were infiltrated with GV3101 harbouring both constructs for each putative effector. Four days after infiltration, we could observe cytoplasmic subcellular localization of both effectors by confocal laser scanning microscopy. Also, plants were monitored for induction of lesion-like symptoms. Gaining insights into the mode of action of these effectors and their interacting host targets can provide useful knowledge for the development of nematode-resistant plants.