

## **032 On the evolution of parasitism genes**

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In the last 5 years considerable effort has been put into the identification of parasitism genes from sedentary plant-parasitic nematodes. Thousands of (partial) DNA sequences are now available from several nematode species, which allows comparison of gene expression in plant-parasitic and other nematode species. From this comparison it is evident that plant-parasitic nematodes

have evolved a set of genes that have no homologues in other nematodes or even in other phyla. Similarly, plant-parasitic nematodes have genes in common with other plant-pathogens, which are absent in other groups of nematodes. And finally, plant-parasites and animal parasites share a unique set of homologues, too. Pieces of this evolutionary puzzle will be illustrated with examples.