Abstract

Two series of experiments were employed in evaluating integrated pest management for the control of root knot nematodes in tea. The first series involved evaluation of several control options involving intercropping tea with marigolds (*Tagetes minuta*), and the use of a nematicide Furadan® 5G and potash fertilizer. The severity of knotting was reduced in treatments with Furadan® 5G, *T. minuta* and potash by 28.7, 24.3 and 44%, respectively, over the 2-year study period. The *T. minuta* intercrop, however, retarded tea development. The second series of experiments involved screening for host plant resistance using 8, 24 and 25 cultivars at each of three different sites. The cultivars displayed significant variation in resistance to root knot nematode infection; several were resistant, a few moderately tolerant, while others were susceptible. Generally, progenies of susceptible and resistant cultivars exhibited similar phenotypes to their progenitors, indicating apparent susceptibility and resistance, to be highly heritable traits. The study demonstrated that the use of nematode-resistant cultivars is clearly the most practicable, environmentally friendly and cost-effective option for controlling nematodes in tea, although augmenting host-plant resistance with potash fertilizer could give better results.