This pest has become one of the most important problems in both spring and winter field beans.

The nematodes can be introduced to fields by infested seed and once established in the soil, can remain viable for many years, placing future crops of beans at risk from damage. Damage is often first seen as the plants reach the flowering stage, although earlier symptoms can be found at any stage after crop emergence.

The plants are often stunted and the stems thickened and twisted. Leaves may also become thickened and brittle with a bronze discolouration occurring in the leaf petioles. Later, the stems turn brown or rust red in colour and may swell, twist and break. Pods fail to fill evenly and seeds are poorly developed and become black and shrivelled as they mature.

Affected plants may appear singly, or in larger patches of the field. The appearance of single isolated plants across the field may indicate that infested seed is the source, whereas more general crop damage would indicate that the infestation has occurred as a result of the soil being infested from a previous bean crop. However, multiplication is greatly enhanced during a wet spring.

Crop loss from this pest can be appreciable. Several crops have had their yield reduced to less than 0.8 tonnes/ha. Infested seed is unsuitable for drilling, but beans are still usable in animal feed compounds and blemish-free produce may still be suitable for export.

The nematodes are slender, transparent and virtually microscopic. They can be found in vast numbers within the stem or leaf tissue or in seed, by microscopic examination. *Ditylenchus gigas* is the most common species on field beans and is found in broad beans, but *Ditylenchus dipsaci* can also be found on broad beans.

Stem nematode can be seed borne and can also survive in the soil in a free-living form. The principle route of infestation is from the use of infested seed, infested bulbs or from contaminated soil. Unfortunately, there is no standard for infestation in the UK Field Bean Seed Certification Scheme but the NIAB Quality Field Bean Scheme for certified beans includes a certificate of freedom from stem nematodes.

Given that the pest can infest clean land, only tested bean seed should be used. Farm saved seed should be carefully sampled and tested before re-planting and purchasers of certified seed should ensure that the test has been carried out. Seed can be tested by PGRO or NIAB. The test is carried out on a sample of seed from the bulk. It is possible to detect the presence of nematodes in this sample. However, it cannot accurately determine the level of infestation or the percentage of infested seed. It is important that a representative sample is taken, but very low levels of infestation may be present below the limit of detection, even though most seedsmen take all precautions to ensure freedom from nematode.

An adequate crop rotation and good weed control will also help to prevent the pest building up in the soil but, where the crop has been diagnosed as being infested, the produce should not be used for seed and a break of at least ten years should elapse before beans, lupins or peas are grown.