PALE CYST NEMATODE (PCN) PROGRAM
INFESTED FIELD CONFIRMATORY POLICY

Introduction:

This policy is specific to PCN (*Globodera pallida*) and is based on knowledge about the biology and epidemiology of the organism. Specimens must be identified and confirmed by an APHIS-approved laboratory using definitive morphological/morphometric and molecular identification techniques. If the pest is confirmed, regulatory action will result as outlined in CFR 301.86-3(c).

Morphological and Molecular PCN Confirmation Process:

Complete, definitive identification of *Globodera pallida* is a multi-step process, as follows:

1. Verify that the sample contains suspect *Globodera* spp. cysts.

2. Verify that the suspect cysts and/or any juvenile forms have key characters and are morphometrically consistent with *Globodera* species.

3. Verify that the suspect nematode tissue yields DNA identifiable as *Globodera pallida* (as per Plant Protection and Quarantine Center for Plant Health Science and Technology - Beltsville protocol by Skantar et al., 2007, posted at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2586493/).

PCN Infested Field Confirmation:

As per 7 CFR 301.86-3(c), The Administrator will designate a field as an infested when a pale cyst nematode is found in the field. The technical minimum threshold for declaring a field infested/positive for pale cyst nematode is met by detecting a minimum of two cysts from two samples that were identified as *Globodera* sp. by morphological/morphometric analysis, and at least one of the cysts was viable and confirmed as *Globodera pallida* (PCN) by molecular (DNA) analysis. It is not necessary for the two samples to come from the same survey event.