ten-fold greater in the second run than the first run. In the first run, the 25% amendment resulted highest eggs/plant and the 75% amendment the lowest egg/plant. The highest and lowest were reversed in the second run with the greatest reproduction in the 75% amendment and the lowest in the 25% amendment. The vermicompost-amended seedling-starter mix did not provide a consistent or predictable benefit to the eggplant seedlings.

MOLECULAR AND MORPHOLOGICAL CHARACTERIZATION OF *GLOBODERA* POPULATIONS FROM OREGON AND IDAHO. **Skantar, Andrea M., Z.A. Handoo, L.K. Carta, and D.J. Chitwood.** USDA-ARS, Nematology Laboratory, Beltsville, MD 20705.

An unusual population of cyst nematode was found in soils collected from a Powell Butte, Oregon field with a cropping history including potatoes, wheat, other crops, and significant weed presence. Morphologically, these nematodes possessed characteristics that collectively set them apart from known *Globodera* species. Compared to *G. pallida*, the cyst body length was slightly longer and the second-stage juvenile stylet length was slightly shorter. In some individuals, the J2 stylet knob height was greater and the tail annules were more prominent than in *G. pallida*, and the tail abruptly narrowed with a slight constriction near the posterior third of the hyaline terminus. Compared to *G. rostochiensis,* the hyaline tail terminus had a larger number of refractive bodies, and cysts of this population had a smaller Granek's ratio and fewer cuticular ridges between the anus and vulva. In some individuals, the tail termini of second-stage juveniles were more bluntly pointed, and the stylet knobs were more anteriorly directed with greater height. Unlike *G. tabacum*, the cyst wall often lacked a network-like pattern, and in some individuals, the juvenile tail terminus distinctly narrowed after a constriction. Molecularly, the populations from Oregon and Idaho were similar to each other but distinct from other species in the genus *Globodera*. Multiplex PCR of the ITS rDNA region gave results similar to *G. tabacum*; however, ITS-RFLP patterns were observed to have individual bands in common with *G. rostochiensis* and *G. pallida*. Phylogenetic analysis based on ITS1&2 rDNA sequences showed greatest similarity to populations from Argentina and Chile; together they form a moderately supported clade, distinct from *G. rostochiensis*, *G. tabacum, G. mexicana,* European type *G. pallida*, and several *G. pallida* populations from South America.

AN UPDATE TO THE INTRODUCTION TO NEMATODES: A NEW MULTIMEDIA PRESENTATION. **Skantar[1], Andrea M., E.C. McGawley[2], M.J. Pontif[3], and C. Overstreet[2].** [1]USDA ARS Nematology Laboratory, 10300 Baltimore Ave., Bldg. 011A BARC West, Rm. 165B, Beltsville MD 20705. [2]Louisiana State University Agricultural Center, Dept. of Plant Pathology and Crop Physiology, 302 Life Sciences Bldg., Baton Rouge, LA 70803, [3] Louisiana State University Agricultural Center, Sugarcane Research Station, St. Gabriel, LA 70776.

The Introduction to Nematodes is a multimedia presentation that contains over 100 multi-layered slides comprised of 481 photographs, 155 illustrations, 17 tables and 14 videos. The presentation is formatted as a Quicktime movie and will play on either a Macintosh or a PC computer. The presentation is accompanied by a syllabus, with notes and credits for each slide, an index of the 19 sections (General, History, Morphology, Body Systems, Symptoms, Loss Estimates, Movement & Dissemination, Sampling, Extraction, Population Dynamics, Thresholds, Management, Taxonomy, Parasitism, Key for Identification, Highlighted Genera, Molecular Diagnostics, Disease Complexes and Entomogenous Nematodes), a "read me" file which contains instructions for obtaining and using the Quicktime player, and a set of "thumbnail views" of each slide. This presentation can be obtained as a free download from websites hosted by the Society of Nematologists (SON), the Organization of Nematologists of Tropical America (ONTA), and the European Society of Nematologists (ESN). This presentation will highlight a new section featuring molecular diagnostics of plant-parasitic nematodes.

PERFORMANCE OF ABAMECTIN APPLIED AS A SEED TREATMENT NEMATICIDE. **Slaats[1], Brigitte E., J. Simmons[2], J. Vaz[3], and B. Lovato[3].** [1]Syngenta Crop Protection AG, WST-540.1.07, Schaffhauserstr., 4332 Stein AG, Switzerland, [2]Syngenta Crop Protection LLC, VBRC, 7145 58th Avenue, Vero Beach, FL 32967, USA, [3]Syngenta Protecao de Cultivos Ltda, Av. Nacoes Unidas 18.001, 04795-900 Sao Paulo, Brazil.

Once a field site is infested with plant-parasitic nematodes they are hard to eradicate. Management of nematodes is attainable through traditional crop rotation and cultural measures however such practices are difficult for growers to follow. Due to a growing world population and limited production areas, a demand for higher yields in existing production areas has arisen coupled with increased intensification which is very favourable for nematode multiplication. The use of resistant or tolerant varieties is a common practice to prevent crop loss caused by nematode infestation. However nematode species not targeted by the specific genetic resistance are not affected, multiply and cause yield loss. Due to increasing regulatory pressures there are only a limited number of chemical nematicides still registered with use restrictions. In order for the chemical to be effective the nematicide needs to come into contact with the mobile nematode in the area of the root zone. An effective method of application is as a seed treatment. A seed treatment nematicide can actively protect the young seedling in the first critical weeks of early establishment and secure crop yield from decreases caused by nematode damage. One of the newest classes