

y machos, así como plantas diferenciales, implicando mayor cantidad de tiempo con resultados en algunas ocasiones poco convincentes. El análisis de ADN y particularmente el uso de la reacción en cadena de la polimerasa (PCR), ofrecen la sensibilidad y especificidad genética requerida para fines de diagnóstico. Como una herramienta más en el diagnóstico de nematodos de importancia cuarentenaria, en el Laboratorio de Nematología “Dr. Carlos Sosa-Moss” se utiliza la PCR con la finalidad de corroborar la identificación de los patógenos detectados. Recientemente, se ha estado trabajando con *Meloidogyne chitwoodi* utilizando el par de oligonucleótidos 1839 y C64, específicos para este nematodo. Los productos amplificados muestran una banda de aproximadamente 900 pb, específica para las poblaciones de este organismo. El par de iniciadores utilizado puede evidenciar la presencia o ausencia de *M. chitwoodi* en poblaciones mezcladas. Para el caso del nematodo dorado (*Globodera rostochiensis*), se ha utilizado el par de oligonucleótidos 5SG-SLG haciendo el PCR con ADN extraído y utilizando el sobrante de un solo quiste (huevecillos, juveniles y restos de cutícula). Los productos amplificados de PCR tanto para ADN como para el quiste individual, muestran una banda de 914 pb que corresponde a *G. rostochiensis*, demostrando así la especificidad de estos iniciadores y la rapidez de ésta técnica ya que al realizar la PCR directamente se evitan la extracción de ácidos nucleicos, lo cual agiliza el proceso del diagnóstico del nematodo dorado a partir de un solo individuo. Por otra parte, con respecto al nematodo agallador del trigo (*Anguina tritici*) se utiliza el par de iniciadores rDNA2 y rDNA1.58S para detectar los Espacios Internos Transcritos (ITS) en el ADN ribosomal. El fragmento obtenido ITS1 para el agallador del trigo es de aproximadamente 550 bp, y al hacer una digestión de este fragmento con la enzima de restricción Alu I se logran obtener dos fragmentos de 277 y 274 que corresponden a *A. tritici*.

INFORMATION COMPUTER SYSTEMS TO SUPPORT THE SEARCH FOR QUARANTINE PLANT-PARASITIC NEMATODES ASSOCIATED WITH DIFFERENT PLANT MATERIALS IMPORTED BY BRAZIL [SISTEMAS INFORMATICOS APOYANDO LA EVALUACION DE LA IMPORTANCIA CUARENTENA DE NEMATODOS ASOCIADOS CON PLANTAS Y PRODUCTOS DE PLANTAS IMPORTADAS POR BRASIL]. V. R. V. Rissoli¹ and R. C. V. Tenente², ¹Universidade Católica de Brasília, QS 07—lote 01 (70.022-900), Taguatinga-DF and ²Embrapa Recursos Genéticos e Biotecnologia, C.P. 02372 (70770-900), Brasília-DF, Brazil.—Pest interception is very important in efforts to diminish the risk of introducing new nematode species into Brazil and also in recording the nematode species that occur in the National Territory. To make this information and other services available via the internet, the Nematological Laboratory of Embrapa Genetic Resources and Biotechnology, together with the Catholic University of Brasília, has developed a website. A database of nematological germplasm analysis, established at Embrapa Genetic Resources and Biotechnology (Brazil), was used to develop a computer system to record details of all plant materials imported into Brazil. The database was fed into a Germplasm Information System (SIG) that record whether the commodity is infected or not by nematodes, the donator and, receptor institutions, and the year of introduction. The system is a powerful tool for providing advice on risk categories to researchers and farmers. This technological resource is available to different users. Therefore, a more extensive project was developed in three main phases: surveys and services, development of a user friendly interface, and the building of computational and programming services necessary for this virtual environment. A bibliographical reference search service, which has helped to improve research and other studies, both international and national, related to nematodes, is now available on this site. This virtual service makes it possible to search Brazilian nematological research results and it is expected that it will help to improve Brazilian Agricultural productivity and quality. The Nematological Laboratory has also developed an intuitive virtual environment that allows even easier interaction in searching the nematological bibliography. A cost-benefit analysis of the computer systems that have been developed reveals a potentially substantial contribution to Brazilian Agriculture. The SIG survey results showed that nematodes detected and identified in plant materials imported from different countries between 1981 to 2003 are of great significance for Brazilian Agriculture. All of these services can be

accessed through this internet site: <http://icewall2.cenargen.embrapa.br/>. However, the nematological analysis database located at Embrapa Genetic Resources and Biotechnology, Brazil, is not available to outside users.

BIORATIONAL SEEDLING PROTECTION AGAINST PLANT-PARASITIC NEMATODES [PROTECCION BIORACIONAL DE SEMILLAS CONTRA NEMATODOS FITOPARASITOS]. **L. A. Payan¹** and **J. O. Becker²**, ¹*Syngenta Crop Protection, Visalia, CA 93292*, and ²*Department of Nematology, University of California, Riverside, CA 92521*.—Real and perceived concerns about pesticide pollution of air, soil and water, and their potential consequences for the environment has promoted efforts that minimize these factors while maintaining agricultural productivity and profitability. Overall, the US Food Quality Protection Act has been a turning point for all involved parties to focus on reduced risk innovations for pesticide developments. Application rates of many modern fungicides, insecticides and herbicides have dropped to a few grams a.i. per hectare. In contrast, plant protection against parasitic nematodes still relies frequently on fumigants and non-volatile nematicides with high-risk chemistry and a.i. application rates of several kg per hectare. Recent laboratory, greenhouse and field trials have shown that seed coating with abamectin is effective in mitigating root-knot nematode attack of cotton and various vegetable seedlings. Abamectin, derived from the actinomycete *Streptomyces avermitilis*, is insecticidal, acaricidal and nematocidal. It has an EPA Reduced Risk Status because of a new technology, its low toxicity rating (class IV), low water solubility and rapid degradation. In *Meloidogyne incognita* infested field trials with cotton and vegetables abamectin seed coating was as effective in reducing galling and increasing yields as carbamate and organophosphate nematicides. Seed coating with abamectin promises to be an ecologically sound and effective plant protection tool that has the potential to minimize the nematicide load in the environment.

ADVANTAGES AND DISADVANTAGES OF THE ELECTRONIC VERSION OF ONTA NEWSLETTER [VENTAJAS Y DESVENTAJAS DE LA VERSION ELECTRONICA DE LA CARTA INFORMATIVA ONTA]. **Renato N. Inserra¹** and **José A. Chavarria²**, ¹*Florida Department of Agriculture and Consumer Services, DPI, P.O. Box 147100, Gainesville FL, 32614-7100, U.S.A* and ²*Department of Crop Protection, Mayagüez Campus, University of Puerto Rico, P.O. BOX 9030, Mayagüez, PR 00681-9030, U.S.A*.—According to article VI, Section 3 of the constitution of the Organization of Nematologists of Tropical America (ONTA), the ONTA Executive Committee appoints an Editor-in-Chief of the ONTA NEWSLETTER. The editor may choose a co-editor. The duties of these editors are to circulate the Organization's Newsletter to inform members of current events in ONTA, in Nematology and related Sciences. The Newsletter had a very important role in the past since it was the major means of communication to convey information about the organization's activities to its members. The two yearly issues of the Newsletter were prepared and distributed in a printed version to the members at a cost of about U.S. \$1,200 annually. In 2000, the ONTA Executive Committee recommended Newsletter delivery via the ONTA website. As a result, the ONTA NEWSLETTER is now distributed solely as an electronic version posted on the website. This change reduced the cost for the preparation and distribution of the Newsletter. However, the importance of the role of the Newsletter as major communication tool for ONTA members has diminished, because the website where the Newsletter is posted, has acquired the major role as a source of information for the members. The future role of the Newsletter is unclear and needs to be revitalized. ONTA member input and contributions are needed for the Newsletter to continue as a valuable service.

THE ONTA FOUNDATION, BUILDING THE FUTURE NOW [LA FUNDACION ONTA, CONSTRUYENDO HOY EL FUTURO]. **C. Overstreet**, *Louisiana State University, Department of Plant Pathology and Crop Physiology, Baton Rouge, LA 70803, U.S.A.* and **Jimmy R. Rich**, *University of Florida, North Florida Research and Education Center, Quincy, FL 32351, U.S.A.*.—The ONTA Foundation is dedicated to the advancement of our chosen science, Nematology. Foundations serve a valuable role by making funding available for travel, workshops, publication costs, and training. Most