## OIE Reference Laboratory Reports Activities

### Activities in 2015

This report has been submitted: 2016-01-13 17:23:28

| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | New world screwworm (Cochliomyia hominivorax) |
| Address of laboratory: | Apartado Postal 0816-07636 Panama PANAMA |
| Tel.: | +1 979.260.5179 |
| Fax: | |
| E-mail address: | john.b.welch@aphis.usda.gov |
| Website: | www.copeg.org |
| Name (including Title) of Head of Laboratory (Responsible Official): | Francisco Pinilla, Panama - United States Commission for the Eradication and Prevention of Screwworm (COPEG), General Director - Panama Antonio Arroyave, COPEG, General Director - United States |
| Name (including Title and Position) of OIE Reference Expert: | John B. Welch, USDA-APHIS-IS, Entomologist |
| Which of the following defines your laboratory? Check all that apply: | Other: Binational Commission |
**ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards**

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

   Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in OIE Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td>Yes</td>
<td>152 (20 positive)</td>
</tr>
<tr>
<td>Microscopic dissection of larval samples</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Visual inspection of animals for screwworm infestation at inspection stations</td>
<td>Yes</td>
<td>145,294 (0 positive)</td>
</tr>
</tbody>
</table>

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?

   No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

   No

4. Did your laboratory produce vaccines?

   No

5. Did your laboratory supply vaccines to OIE Member Countries?

   No
ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

<table>
<thead>
<tr>
<th>Name of the OIE Member Country receiving a technical consultancy</th>
<th>Purpose</th>
<th>How the advice was provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>URUGUAY</td>
<td>Rearing techniques for New World Screwworm.</td>
<td>Telephone conversations, personal conversations, emails, photos, and videos.</td>
</tr>
<tr>
<td>ECUADOR</td>
<td>Rearing techniques for New World Screwworm for adaptation to rear Philornis downsi.</td>
<td>Exchange visits of scientists, telephone conversations, personal conversations, emails, photos, and videos.</td>
</tr>
</tbody>
</table>

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes
**Title of the study** | **Duration** | **Purpose of the study** | **Partners (Institutions)**
---|---|---|---
Development of a Transgenic Male-Only Strain of New World Screwworm for Mass Production and Release | 1 Year | Develop a male-only strain to reduce costs of mass production, increase efficiency of eradication in the field, and make screwworm eradication more economical for use in other countries. | North Carolina State University

**ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases**

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

13. **What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)**

   a) Articles published in peer-reviewed journals: 7


   b) International conferences: 4


First Research Coordination Meeting (RCM) on the FAO/IAEA Coordinated Research Project “Comparing Rearing Efficiency and Competitiveness of Sterile Male Strains Produced by Genetic, Transgenic or Symbiont-based Technologies” in Vienna, Austria from 6 to 10 July, 2015. Presentation: "Transgenic sexing systems for genetic control of the New World screwworm and the Australian sheep blowfly" by Max Scott.


International Course on trans-boundary diseases - USDA-APHIS (Laboratory on Plum Island and PANAFTOSA), directed to veterinary doctors in South America. Topic: "The screwworm eradication and North and Central America" (September).

c) National conferences: 4
American Association of Veterinary Parasitologists (AAVP) annual meeting, Boston, MA, July 11-14, 2015. Invited plenary presentation " Genetic control of ectoparasite dipteran livestock pests" by Max Scott.


National Congress of Veterinary Medicine, Panama, Republic of Panama, October 2015, "Epidemiological Surveillance System in Parasitic Diseases - New World Screwworm."

Entomological Society of America (ESA) annual meeting, Minneapolis, MN, 15-18 November, 2015. “A Glimpse at 45+ Years (and counting) of Entomological Achievement by John Foster” by Steve Skoda at the ESA’s Plant - Insect Ecosystems Lifetime Achievement Award in Entomology. Highlights of accomplishments regarding population genetics of screwworms were presented.

d) Other:
(Provide website address or link to appropriate information) 7
www.copeg.org

Informed Ministry of Agricultural Development of Panama and the information branch of the OIE of positive cases.

Educational presentations on wound treatment and sterile fly production at 10 livestock fairs in the provinces of Panama, January - December 2015.

Training of 649 Honorary Inspectors throughout Panama, but concentrating in the Barrier Zone, January - December 2015.

Presented 77 lectures throughout Panama to 6,395 livestock producers in animal husbandry techniques with emphasis on prevention of screwworm and other trans-boundary diseases, January - December 2015.

Radio info-spots on Emisora Voz son Frontera and Radio Panama, in the Darien (Barrier Zone) and throughout Panama, January - December 2015.

Project Director’s meeting for the Biotechnology Risk Assessment Grants (BRAG) Program (June 5, 2014), Riverdale, MD. Poster presentation: "Development and evaluation of male-only transgenic strains of the New World screwworm" by Max Scott.
**ToR 7: To provide scientific and technical training for personnel from OIE Member Countries**

*To recommend the prescribed and alternative tests or vaccines as OIE Standards*

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 1
b) Seminars: 2
c) Hands-on training courses: 1
d) Internships (>1 month): 6

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>a El Salvador, Honduras, Mexico, Panama, USA</td>
<td>1, 1, 1, 1, 8, respectively</td>
<td></td>
</tr>
<tr>
<td>b Panama, USA</td>
<td>30, 10, respectively</td>
<td></td>
</tr>
<tr>
<td>c Argentina, Brazil, Ecuador, Panama, Paraguay, Peru, Uruguay</td>
<td>2, 2, 2, 2, 2, 2, 2, respectively</td>
<td></td>
</tr>
<tr>
<td>d Panama</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System certified according to an International Standard?

No

<table>
<thead>
<tr>
<th>Explain Quality Management System in adoption process or currently in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>In process of preparing for ISO 9001:2008 certification.</td>
</tr>
</tbody>
</table>

16. Is your laboratory accredited by an international accreditation body?

No

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

*(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2014, Chapter 1.1.3a)*
ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?
   No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?
   No

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?
    Not applicable (Only OIE Reference Lab. designated for disease)

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?
    Not applicable (Only OIE Reference Lab. designated for disease)

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?
    Not applicable (Only OIE Reference Lab. designated for disease)

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?
    No

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3
24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: