

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 25 avril 2023 12:48

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	New World Screwworm
Address of laboratory:	Planta Productora de Moscas Estériles de Pacora, COPEG; Apdo. Postal 0816-07636; Panamá, República de Panamá
Tel.:	(+507) 296.06.12
E-mail address:	John.b.welch@usda.gov
Website:	www.copeg.org
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Enrique Samudio, General Director, Panama, Ms. Vanessa Dellis, Acting General Director, United States of America
Name (including Title and Position) of WOA Reference Expert:	Dr. John B. Welch, Technical Advisor, United States of America
Which of the following defines your laboratory? Check all that apply:	Binational Commission between the Governments of Panama and the United States of America

TOR1: DIAGNOSTIC METHODS

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

Diagnostic Test	Indicated in WOA Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Direct diagnostic tests		Nationally	Internationally
Identification of New World Screwworm	No	1072	0
Inspection of animal for New	No	153,216	0

World Screwworm Myiasis

TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA?H Members?

No

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOA?H Members?

Not applicable

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

No

7. Did your laboratory validate diagnostic methods according to WOA?H Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOA?H Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOA?H Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOA?H Member?

Yes

NAME OF THE WOA?H MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
URUGUAY	Technical and administrative advice to Uruguay with the design and initiation of an eradication program for New World Screwworm.	Visits by Uruguayan personnel to Panama Weekly videoconferences Videoconferences as needed Telephone calls Email messages Text messages

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOA?H Members other than the own?

No

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Reference Laboratory field personnel collect data in association with all myiasis cases submitted for identification.

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Data is submitted to scientists and administrative personnel.

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

4

Scott, M.J., Morrison, N.I., Simmons, G.S. (2022) *Transgenic approaches for sterile insect control of dipteran livestock pests and lepidopteran crop pests*. In: "Transgenic Insects: Techniques and Applications, 2nd edition" (Benedict, M.Q., and Scott, M.J. eds.) CABI, Wallingford, UK, pp 340-358. Hardcover ISBN: 978-1-80062. DOI: 10.1079/9781800621176.0017.

Paulo, D.F., Williamson, M.E., Scott, M.J. (2022). *CRISPR/Cas9 genome editing in the New World screwworm and Australian sheep blowfly*. In: "Applications of Genome Modulation and Editing", (Verma, P.J., Sumer, H., Liu, J., eds), *Methods in Molecular Biology*, vol 2495. Humana, New York, NY. pp 173-201. Hardcover ISBN: 978-1-0716-2300-8. https://doi.org/10.1007/978-1-0716-2301-5_10

Tietjen, M., Pfeiffer, V., Poh, K.C. "Insights into the genetic landscape and presence of *Cochliomyia hominivorax* in the Caribbean." *Parasitology Research* 2022 doi.org/10.1007/s00436-022-07757-4

Tietjen, M., Pérez de León, A.A., Sagel, A., Skoda, S.R., Phillips, P.L., Mitchell, R.D., Caruth, J., Durán, U., Musai, L., Tortosa, S., and Arp, A.P. "Geographic population genetic structure of the New World screwworm, *Cochliomyia hominivorax* (Diptera:Calliphoridae), using SNPs." *Journal of Medical Entomology* 2022. doi.org/10.1093/jme/tjac024

b) International conferences:

0

c) National conferences:

1

Screwworm... "Beam Them Off the Planet Scotty!" Seminar by John B. Welch and Pamela L. Phillips presented at the National Center for

Electron Beam Research workshop in College Station, Texas, USA on 28 April. Presented the potential use of electron beam for sterilizing New World Screwworm.

d) Other (Provide website address or link to appropriate information):

www.copeg.org

COPEG also uses Facebook, Instagram, Twitter, and radio spots to disseminate information to the public.

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

Yes

a) Technical visit : 1

b) Seminars : 0

c) Hands-on training courses: 1

d) Internships (>1 month) 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
A	Uruguay	14
c	Bolivia (1), Brazil (1), Chile (1), Colombia (2), Guatemala (1), Peru (1), Paraguay (1), Uruguay 15	23

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025: 2017	.pdf	Alcance Acreditacion LE-071.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
New World Screwworm Identification	Consejo Nacional de Acreditación (CNA) del Ministerio de Comercio e Industrias de Panama

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

The screwworm mass production facility is a BSL-2 facility. COPEG's Department of Biological Security maintains protocols, in ISO format, and conducts Biological Security maintenance and inspections on a daily basis. Biological Security personnel also provide training on a regular and as-needed basis.

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOA?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOA?

No

TOR10: NETWORK WITH WOA REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOA Reference Laboratories designated for the same pathogen or disease?

Not applicable (only WOA Reference Laboratory designated for the disease)

24. Are you a member of a network of WOA Reference Laboratories designated for the same pathogen?

Not applicable (Only WOA Reference Laboratory designated for the disease)

25. Did you organise or participate in inter-laboratory proficiency tests with WOA Reference Laboratories designated for the same pathogen?

Not applicable (Only WOA Reference Laboratory designated for the disease)

26. Did your laboratory collaborate with other WOA Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Not applicable (Only WOA Reference Laboratory designated for the disease)

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOA Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOA?

No

29. Additional comments regarding your report:

Yes

Program international training activities continue to be limited due to the impact of COVID.