

SUPPORTING INFECTIOUS DISEASE RESEARCH

# **Product Information Sheet for MRA-139**

Anopheles quadrimaculatus, Strain ORLANDO, Eggs

Catalog No. MRA-139

For research use only. Not for human use.

#### Contributor:

Mark Q. Benedict, Ph.D., Research Biologist, Entomology Branch, Division of Parasitic Diseases, National Center for Infectious Diseases (NCID), Centers for Disease Control and Prevention (CDC), Atlanta, Georgia, USA

### Manufacturer:

CDC

# **Product Description:**

<u>Classification</u>: Diptera, Culicidae, Anopheles <u>Species</u>: Anopheles quadrimaculatus

Strain: ORLANDO

<u>Original Source</u>: Anopheles quadrimaculatus (A. quadrimaculatus), strain ORLANDO was isolated in the United States.<sup>1</sup>

<u>Comments</u>: A. quadrimaculatus, strain ORLANDO is a robust representative of A. quadrimaculatus sensu stricto and a general use 'wild type' colony. It has been identified to species according to morphologic criteria. The ITS2 region was amplified via PCR using non-specific primers; when sequenced, ORLANDO was > 99% match for A. quadrimaculatus. Additionally, PCR was performed on this stock showing that ORLANDO is A. quadrimaculatus type A sensu stricto.

# **Material Provided:**

MRA-139 contains a suitable number of eggs to establish a stock. Eggs are provided on damp filter paper and should be hatched immediately upon receipt.

Note: For information on hatching and establishing a stock of A. quadrimaculatus refer to Methods in Anopheles Research.

# Packaging/Storage:

MRA-139 is prepared and shipped by CDC. The product is provided at room temperature.

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Anopheles quadrimaculatus*, Strain ORLANDO, Eggs, MRA-139, contributed by Mark Q. Benedict."

# Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see <a href="https://www.cdc.gov/biosafety/publications/bmbl5/index.htm">www.cdc.gov/biosafety/publications/bmbl5/index.htm</a>.

#### **Disclaimers:**

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at <a href="https://www.beiresources.org">www.beiresources.org</a>.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

## **Use Restrictions:**

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

#### References:

- 1. Seawright, J. A., Personal Communication.
- 2. Benedict, M. Q., Personal Communication.
- 3. Boyd, M. F. "Successful Cage Rearing of *Anopheles quadrimaculatus*." <u>Science</u> 76 (1932): 370-371. PubMed: 17732209.

ATCC® is a trademark of the American Type Culture Collection.

**BEI Resources** 

www.beiresources.org

E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898