

# MALARIA RESEARCH & REFERENCE REAGENT RESOURCE CENTER

# Anopheles gambiae Patton (Cellia)

Strain Name: M2, MRA-105 Place of Origin: unknown

Colonization date: 1994

**Established by:** Dr. Mark Benedict **Deposited by:** Dr. Mark Benedict

Genotype: p^+ w^1, dl^r, 2La: wild type, TEP1 s/s

Phenotype: monomorphic for cc (collarless)

Karyotype: undefined

Ribosomal DNA form: savanna Insecticide Resistance: dieldrin

## **Larval Morphological Traits**



Collarless (c+) is caused by a uric acid build-up in the larvae. M2 does not display any c+.



M2 larvae will fail to melanize when reared in a dark pan (below) due to the eye color mutation.

## **Adult Morphological Traits**











Morphological characteristics of An. gambiae s.l. adults.

### Authentication Methods used to confirm stock identity

- 1. Examined the color of the larvae when cultured in a black pan: larvae were not melanized when compared to a cohort reared in a white pan.
- 2. Examined adults microscopically for morphological characters: all individuals had standard features of *An. gambiae* and white eye color.

### References referring to this stock:

Benedict, M. Q. and C. S. Rafferty (2002). "Unassisted Isolated-pair Mating of *Anopheles gambiae* (Diptera: Culicidae) Mosquitoes." Journal of Medical Entomology 39(6): 942-944.



Benedict MQ, et al. Mutations in the *Anopheles gambiae* pink-eye and white genes define distinct, tightly linked eye-color loci. J. Hered. 87: 48-53, 1996.

Besansky NJ, et al. Cloning and characterization of the white gene from *Anopheles gambiae*. Insect Mol. Biol. 4: 217-231, 1995.

Mason GF. Genetic studies on mutations in species A and B of the *Anopheles gambiae* complex. Genet. Res. Camb. 10: 205-217, 1967