

Anopheles gambiae Patton (Cellia)

Strain Name: KISUMU1, MRA-762 Place of Origin: Kisumu, Kenya Colonization date: 1975 Established by: Dr. G. Davidson Deposited by: Vincent Corbel Genotype: 2La/+, 2r+/+, TEP1 s/s Phenotype: red stripe, polymorphic for c+ (*collarless*) Karyotype: undefined Ribosomal DNA form: Savanna Insecticide Resistance: none

## **Larval Morphological Traits**



Collarless (c+) is caused by a uric acid build-up in the larvae. Expression is often variable but best seen in L4 larvae. KISUMU is polymorphic for c+



Red stripe-if present, individuals expressing red stripe are female



When reared in a dark pan, larvae with wildtype eye color will melanize when compared to a cohort reared in a white pan.

## **Adult Morphological Traits**



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

## Authentication Methods used to confirm stock identity

- 1. Examined immatures for the collarless (c+) trait: L4 larvae are polymorphic for c+
- 2. Examined the color of the larvae when cultured in a black pan: larvae are distinctly melanized when compared to a cohort reared in a white pan.
- 3. Treated 50 larvae at 1 ppm permethrin for 24 hours; 100% mortality.
- 4. Performed molecular *An. gambiae* identification: all are positive for both *An. gambiae* s.s. and Savanna rDNA form.
- 5. Performed molecular combined 2La and TEP1 PCR: all tested individuals are 2La polymorphic and s/s for the TEP1 allele.

6. Examined adults microscopically for morphological characters: all individuals had standard features of *An.* gambiae and wild eye.

## References referring to this stock:

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