Anopheles gambiae Patton (Cellia)

Strain Name: ASEMBO1, MRA-186

Place of Origin: Asembo, Kenya

Colonization date: 1997

Established by: Dr. Francis Atieli

Deposited by: Dr. Francis Atieli

Genotype: 2La: wild type +/+, TEP1 s/s.

Phenotype: red stripe, polymorphic for c+ (*collarless*)

Karyotype: undefined

Ribosomal DNA form: Mopti and Savanna forms

Insecticide Resistance: none

Notes: rDNA is believed to have Introgressed onto the Y chromosome in this strain forming a Mopti/Savanna hybrid in males (Wilkins et al 2007).

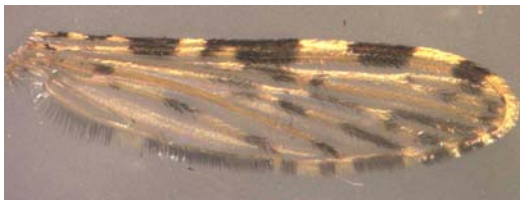
Larval Morphological Traits

Collarless (c+) is caused by a uric acid build-up in the larvae. Expression is often variable but best seen in L4 larvae. ASEMBO1 is polymorphic for this trait.

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

When reared in a dark pan, larvae with wild-type 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. Performed molecular *An. gambiae* identification: all were *An. gambiae* s.s. and mixed Mopti and Savanna rDNA form.
4. Performed molecular combined 2La and TEP1 authentication: 2La wild type and s/s for the TEP1 allele.

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

References referring to this stock:

Wilkins, E., P. Howell, et al. (2007). "X and Y chromosome inheritance and mixtures of rDNA intergenic spacer regions in Anopheles gambiae." Insect Molecular Biology 16(6): 735-741.