



Anopheles gambiae Patton (Cellia)

Strain Name: 4ARR, MRA-121

Place of Origin: derived from G3

Colonization date: 1996

Established by: Dr. Frank Collins

Deposited by: Dr. Frank Collins

Insecticide Resistance: none

Genotype: TEP1 r/s, p^Δ1 w^Δ+, r^Δ1

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

Karyotype: Polymorphic for 2La

Ribosomal DNA form: Mopti

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. 4ARR is monomorphic for c+.

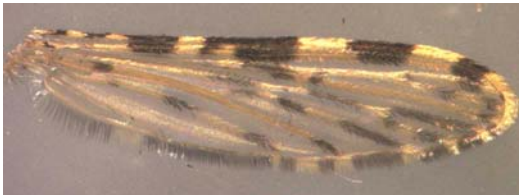


Red stripe-if present, individuals expressing red stripe are female



When reared in a dark pan, larvae with wild-type eye color will melanize when compared to a cohort reared in a white pan. 4ARR will not melanize.

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 50 pupae microscopically for eye color: all individuals examined had pumpkin or pink eye color.
3. Examined adults microscopically for morphological characters: all individuals had standard features of *An. gambiae*.



References referring to this stock:

Gorman, M. J. and S. M. Paskewitz (1997). A Genetic Study of a Melanization Response to Sephadex Beads in Plasmodium-Refractory and -Susceptible Strains of *Anopheles gambiae*. 56: 446-451.

Paskewitz, S. M. and M. Riehle (1998). "A Factor Preventing Melanization of Sephadex CM C-25 Beads in Plasmodium-Susceptible and Refractory *Anopheles gambiae*." *Experimental Parasitology* 90(1): 34-41.

Zheng, L., S. Wang, et al. (2003). "Quantitative trait loci in *Anopheles gambiae* controlling the encapsulation response against *Plasmodium cynomolgi* Ceylon." *BMC Genetics* 4 (1): 16.

Related Sequences:

Polymorphic for TEP1 gene: TEP1 gene refractory – Pubmed Accession Number XM_318488 and TEP1 gene susceptible - Pubmed Accession Number XM_315150