

Strain Name: RMOSPW, MRA-111 Place of Origin: isolated from G3 Colonization date: 1995 Established by: Dr. Mark Benedict Deposited by: Dr. Mark Benedict

Anopheles gambiae Patton (Cellia)

Genotype: p^w; w^+; R92b+>6)1; r^1 Phenotype: polymorphic for c+ (*collarless*); mosaic eye color 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. RMOSPW 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. RMOSPW 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 are not melanized when compared to a cohort reared in a white pan.
- 2. Examined 100 pupae microscopically for eye color: all individuals examined had mosaic eye color.
- 3. Examined adults microscopically for morphological characters: all individuals had standard features of *An. gambiae*.



References referring to this stock:

Beard CB, Benedict MQ, Primus JP, Finnerty V, Collins FH (1995) Eye pigments in wild-type and eye-color mutant strains of the African malaria vector *Anopheles gambiae*. Journal of Heredity 86:375-380

Benedict MQ, Besansky NJ, Chang H, Mukabayire O, Collins FH (1996) Mutations in the *Anopheles gambiae* pink-eye and white genes define distinct, tightly linked eye-color loci. Journal of Heredity 87:48-53

Benedict MQ, McNitt LM, Cornel AJ, Collins FH (2000) Mosaic: a position-effect variegation eye-color mutant in the mosquito *Anopheles gambiae*. Journal of Heredity 91:128-133