Anopheles arabiensis Patton (Cellia)

**Strain Name:** SENN  
**Place of Origin:** Gezira, Sudan  
**Colonization date:** 1969  
**Established by:** Malaria Training Center  
**Deposited by:** Dr. Mustafa Dakeen  
**Genotype:** La/La, TEP1 s/s

**Phenotype:** red stripe, monomorphic for c+ (*collarless*), Increased cytochrome P-450 activity  
**Karyotype:** polymorphic for 2Ra, 2Rb, and 2Rbc. Also has inversion on 3Ra and 2La is fixed in inverted position.  
**Insecticide Resistance:** dieldrin

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### 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. SENN 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.

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### Adult Morphological Traits

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

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**Authentication Methods used to confirm stock identity**

1. Examined adults microscopically for morphological characters: all individuals had standard features of *An. gambiae s.l.* and wild eye color.  
2. Exposed L4 larvae to 1ppm dieldrin for 1 hour to confirm resistant status – expect ~100% survival. Continue stock with survivors.  
3. Performed molecular *An. gambiae s.l.* identification: stock is *An. arabiensis*.  
4. Performed molecular GABA PCR: stock shows 100% GABA mutation.
References referring to this stock:


Related Sequences:

*Anopheles arabiensis* strain SENN GABA receptor subunit (Rdl) gene, partial cds - Pubmed Accession Number AY787486