

*Anopheles arabiensis* Patton (Cellia)

**Strain Name:** DONGOLA, MRA-856

**Place of Origin:** Dongola, Sudan

**Colonization date:** 2004

**Established by:** Tropical Medicine Research Institute

**Deposited by:** Dr. Badria El Sayed

**Genotype:** no information

**Phenotype:** monomorphic for c+ (*collarless*)

**Karyotype:** polymorphic for 2Ra and 2Rb, inversion on 3R.

**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. DONGOLA is monomorphic for c+.

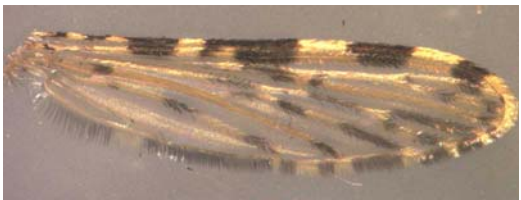


Red stripe-if present, individuals expressing red stripe are female. DONGOLA should not have this characteristic.



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 monomorphic for c+
2. Examined larvae for the absence of the red stripe character.
3. Exposed 50 L4 larvae to 1ppm dieldrin for 1 hour to confirm susceptible status.
4. Examined adults microscopically for morphological characters: all individuals had standard features of *An. gambiae s.l.* and wild eye.
5. Performed molecular *An. gambiae* identification authentication: all *An. arabiensis*.
6. Performed molecular authentication of the ND5 region to differentiate KGB from DONGOLA.



**References referring to this stock:**

Ng'habi, K. R., A. Horton, et al. (2007). "A New Robust Diagnostic Polymerase Chain Reaction for Determining the Mating Status of Female *Anopheles gambiae* Mosquitoes." *Am J Trop Med Hyg* 77(3): 485-487.