

WHAT IS *ANOPHELES ALLOPHA* (LUTZ & PERYASSÚ, 1921) (DIPTERA: CULICIDAE) ?

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We regard Anopheles (Nyssorhynchus) allopha (Lutz & Peryassú, 1921) as a nomen nudum in view of the ambiguities in its original description, as explained in this note.

In their recent work on the Anopheline mosquitoes of the Amazon Region, Faran & Linthicum (1981) divided *Anopheles (Nyssorhynchus) albitarsis* Lynch Arribálzaga, 1878 in two species: *An. albitarsis* and *An. allopha* (Lutz & Peryassú, 1921), the first being restricted to the South-East of South America and the second extending from Guatemala to a few degrees below the Tropic of Capricorn. *An. allopha* has also been used in a later publication (Clark-Gil & Darsie, 1983), and before it is adopted by other workers we think it appropriate to point out that this name cannot be used, for the following reasons.

An. allopha was described, from Rio de Janeiro, in 1921 by Lutz & Peryassú (*In Peryassú, 1921*) as *Cellia allopha* when species with some morphological characters coincident with those of the present subgenus *Nyssorhynchus* Blanchard, 1902, were placed in the genus *Cellia* Theobald, 1902. Later, *Cellia* became a subgenus of *Anopheles*, morphologically different from *Nyssorhynchus* and restricted to the African Continent.

In the original description of *allopha* it is stated that in the abdominal tergites there are creamish scales forming triangles, the species being close to *argyritarsis* but differing by being slightly paler and by lacking the lateral tufts of scales on the abdomen. This absence of tufts of scales is also a character given in a dichotomous key by Peryassú (1921) to separate *allopha* from the other Brazilian anophelines known at the time. In an illustration that accompanies the original description, the abdominal tergites show clearly the median patches of scales and the absence of the lateral tufts. The wing in the figure is undoubtedly of the subgenus *Nyssorhynchus* (sixth vein white with a small black spot near each extremity), but the absence of the lateral tufts excludes it from this subgenus, while the presence of the dorsal scales excludes it from the subgenus *Myzorhynchella* Theobald, 1907, in which both the tufts and the dorsal scales are lacking. Therefore, by the combination of its wing markings and abdominal scaling, *allopha* cannot be placed in any of the subgenera of American anophelines.

After the description of *allopha* several specialists were unable to define it. Bonne (1924) and Dyar (1925) regarded it as a synonym of *argyritarsis*, and Christophers (1924) as a variety of this species. Root (1926), while studying the *Nyssorhynchus*, hesitated to regard *allopha* as a synonym of *argyritarsis* stating that "The reference to this species of Peryassú's '*Cellia allopha*' is questionable, since I was not able to examine the types of Peryassú's species. Of species identified as '*allopha*' by Peryassú and by men he had trained, a majority belonged to the present species (*argyritarsis*), although some badly-rubbed specimens of *albitarsis* and of *darlingi* were also included". In 1928 Costa Lima did not envisage *allopha* as a valid species, proposing that this name should not be used even as a variety of *argyritarsis*. In the same year Dyar placed *allopha* as a synonym of *argyritarsis*, and Shannon & Davis (1930) and Shannon (1933) did not include *allopha* among the synonyms of any of the anophelines known at the time. However, for Souza Pinto (1934) *allopha* would be a synonym of *argyritarsis*, and for Lane (1953), of *albitarsis*.

The authors of *allopha* did not designate a type for the species. As both of them had been on the staff of the Oswaldo Cruz Institute we tried to locate specimens of this species in the Entomological Collection of the Institute: we only found one vial, in Lutz's collection, with four pinned specimens labelled *Cellia allopha*, but they all were *Anopheles parvus* (Chagas, 1907), a species belonging to the subgenus *Myzorhynchella* and known before *allopha* was described.

Since long ago several workers have pointed out the fact that *An. albitarsis*, one of the vectors of human malaria in various parts of South America, is a polytypic or a markedly polymorphic species (Ayroza Galvão, 1940; Ayroza Galvão & Damasceno, 1944; Deane, Causey & Deane, 1948; Forattini, 1962; Kreutzer, Kitzmiller & Rabbani, 1976; Iglesias, Nascimento & Oliveira, 1981). However, even if *albitarsis* is a complex of cryptic species, the name *allopha* could not be used to designate one of them.

For the reasons above we think it suitable to regard *Anopheles allopha* (Lutz & Peryassú, 1921) as a *nomen nudum*.

RESUMO

Consideramos *Anopheles (Nyssorhynchus) allopha* (Lutz & Peryassú, 1921) como *nomen nudum* em vista das ambigüidades existentes na descrição original, conforme explicamos nesta nota.

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