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# “Terrible hairy fly” (Insecta: Diptera: Mormotomyiidae).

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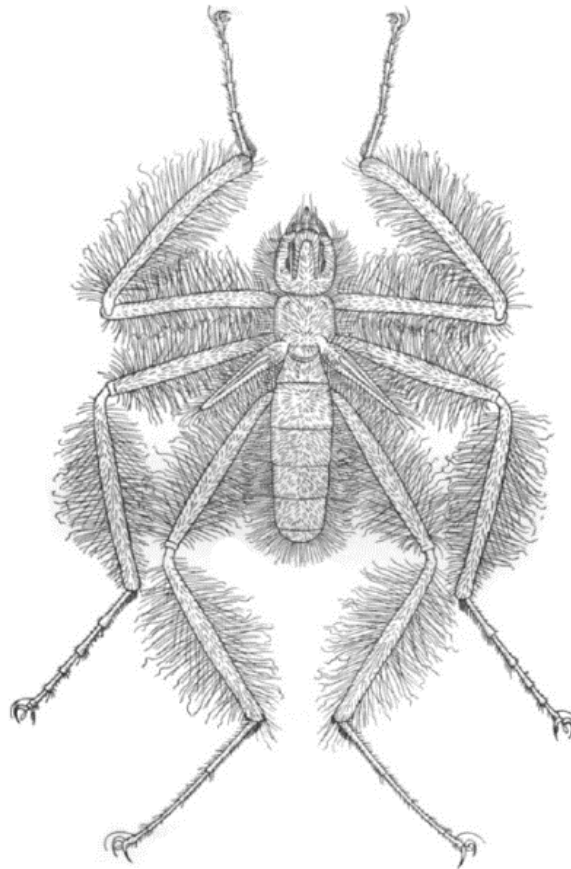
**Potential competing interests:** No potential competing interests to declare.

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The family Mormotomyiidae was originally thought to belong to the superfamily Sphaeroceroidea but was later placed in the superfamily Hippoboscoidea, later work suggested that it belonged to the Carnoidea, but work in 2011 suggested that its true affiliation is to the Ephydroidea. It contains only one known species, *Mormotomyia hirsuta* Austen, 1936, commonly known as the terrible hairy fly or terrible hairy fly, which is found in Kenya. The specimens were collected from a mountain site on Ukasi Hill, in a crevice where a bat roost is located; This may be the most restricted geographic distribution for any fly family and some fly experts think it will ultimately prove to be the only fly family entirely restricted to Africa [1-5].

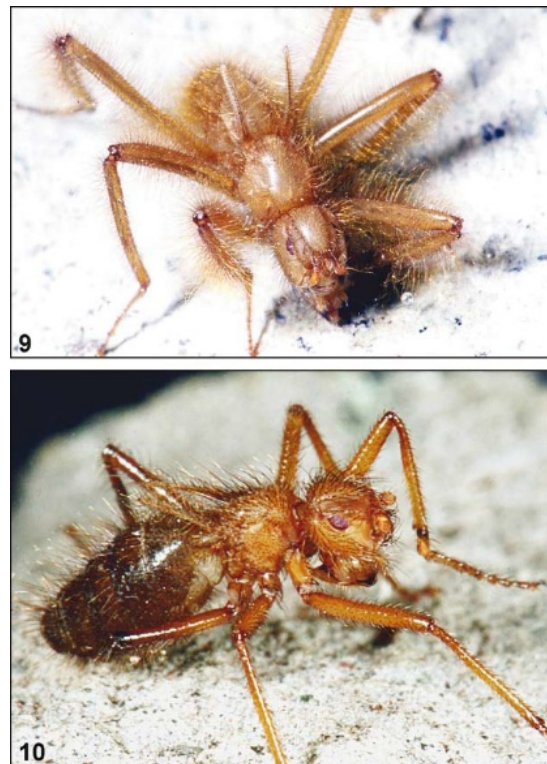
Mormotomyiidae larvae were collected from bat guano. Adult flies are believed to feed on bats' bodily secretions. The fly measures about 1cm long, has hairy legs, and, due to its non-functional wings and tiny eyes, looks more like a spider than a fly. Specimens were collected only three times, in 1933, 1948, and 2010 (Figures 1-4) [6-9].



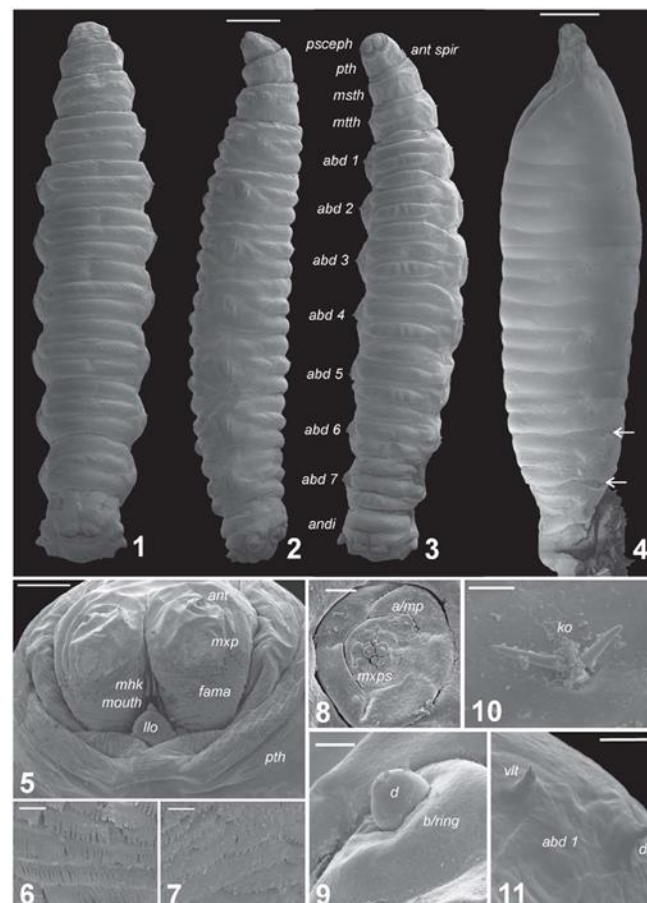
**Figure 1.** A drawing of a male specimen. Source: <https://en.wikipedia.org/wiki/Mormotomyiidae>.



**Figure 2.** Rare: The 'terrible hairy fly' is an appropriate nick-name. Source: <https://www.dailymail.co.uk/sciencetech/article-1336799/Mormotomyia-Hirsuta-Africas-terrible-hairy-fly-Kenya-62-years.html>,



**Figure 3.** Fly feeds on bat feces, and can hitch a ride with a 'partner' too. Sources: Photo: Robert Copeland released via AFP 4-12-2010 and <https://g1.globo.com/mundo/noticia/2010/12/terrivel-mosca-peluda-e-encontrada-no-quenia.html>.



**Figure 4.** Scanning electron micrographs of the third-instar larva of *Mormotomyia hirsuta* Austen, 1936: (12) dorsolateral tubule on the first abdominal segment, from above; (13) detail of mesothorax indicating positions of dorsal pits; (14) dorsomedial pit on mesothorax; (15) dorsolateral pit on mesothorax; (16) dorsomedial pit on the third abdominal segment; (17) dorso-sublateral pit on the third abdominal segment; (18) creeping welt at junction on the mesothorax, ventral; (19) detail of same; (20) creeping welt on a second abdominal segment, ventral; (21) detail of same. Source: African Invertebrates, 55(2):419-445 (2014). <https://doi.org/10.5733/afin.055.0202>.

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