

From Rock Fossils to Pop Insects

Aleiodes shakirae

The Scientists

Eduardo Mitio Shimbori & Scott Richard Shaw

Shakira

Shakira Isabel Mebarak Ripoll (1977 -)

Shakira is a Colombian singer and songwriter, titled as the “Queen of Latin Music” and noted for her musical versatility. She made her recording debut at the age of 13 with *Magia* (1991). Not until her third and fourth album *Pies Descalzos* (1995) and *Dónde Están los Ladrones?* (1998) she rose to prominence in Hispanic countries. With her fifth album, *Laundry Service* (2001) she entered the English-language market and sold over 13 million worldwide. Buoyed by the international success “Whenever, Wherever” (681 million views on YouTube) and “Underneath Your Clothes”, the album extended the global reach of Latino singers.

With 145 songs, Shakira has sold over 85 million records. In 1997, she founded the *Pies Descalzos* Foundation, a Colombian charity with special schools for poor children all around Colombia. The foundation’s focus is on aid through education and has five schools across Colombia that provide education and meals for 4,000 children. In 2005, Shakira became a founding member of Latin America in Solidarity Action, promoting integrated early childhood public policies. In 2010, she collaborated with the World Bank to establish an initiative that distributes educational and developmental programs for children across Latin America.

Biology

Aleiodes shakirae belongs to a genus of the family Braconidae of parasitoid wasps described back in 1838. The species in this family are also known as mummy-wasps. Females of *Aleiodes* wasps attack caterpillars of various species, including many pests such as Gypsy moths and tent caterpillars, and then deposits eggs inside the caterpillars. The egg hatch and the wasp larva feeds on the caterpillar, leaving a hardened caterpillar skin, or mummy. As the mummy dries, the middle section sometimes bends and dries in different ways, resulting in different but distinctive bent caterpillar mummies for some species (such as those caused by the Shakira wasp). After 3-6 weeks the wasp pupates within the mummy and eventually the adult breaks out, leaving a small hole in the husk of the caterpillar.

Naming

Named by Scott R. Shaw

I suggested to Eduardo Shimbori that we name this species after Shakira when we were working together on a study of the *Aleiodes* wasps of eastern Ecuador. *Aleiodes* are sometimes called “mummy wasps” because they feed as parasites inside caterpillars, eventually killing them in a unique way that causes the caterpillar carcass to become mummified. Later the adult wasp emerges from the caterpillar mummy, leaving a visible exit hole near the posterior end. In this particular instance, the Shakira wasp larva, as it feeds inside the inchworm caterpillar, causes the dying caterpillar to bend and twist its body in the middle (the abdomen, or belly).

This contortion of the caterpillar's abdomen reminded me of belly-dancing, for which the South American superstar Shakira is also famous. We therefore thought this pretty little insect would be a nice one to name in honor of Shakira, since it includes "belly-dancing" behavior in the host caterpillar.

Cenozoic – HOLOCENE – 11,650 before present up to present.