

Female dragonflies found to fake death to avoid male advances

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(Phys.org)—A biologist with the University of Zurich has discovered a species of dragonfly whose females play dead to avoid copulating with other males once her eggs have already been fertilized. In his paper

published in the journal *Ecology*, Rassim Khelifa recalls his first experience with a female mooreland hawker dragonfly playing dead, and what he found after further study of the species.

As Khelifa describes it, he was out collecting larvae in the Swiss Alps one day, when he happened to notice one [dragonfly](#) chasing another—suddenly, the one being chased simply stopped flying and crashed to the ground, belly up. The pursuer, he notes, paused for a moment, then moved on. As Khelifa approached the dragonfly on the ground he noted it was female and then was surprised when she suddenly awoke, turned over and flew away.

Intrigued, and suspecting the behavior was intentional, Khelifa initiated a study of the species in their native environment, watching 31 male/female pursuits over time. He reports that the females tried the fake death routine 27 times, and that it worked 21 times. He notes further that in each of the fake death attempts, the female had just left her [eggs](#), or was on her way to tend to them again.

After noting the fake death behavior, Khelifa reports that it makes sense for the female hawker, because unlike other species of dragonfly, the males do not quit attempting to mate once finding success, nor do males assist in protecting the eggs. He notes also that with the hawker species, the males have the ability to pull sperm from prior [males](#) out of the [female reproductive tract](#) with their penises, and perhaps even worse, can cause damage if he mates with a female that has already laid her eggs.

Khelifa also notes that the females tended to hide among dense vegetation when searching for food, likely another means for warding off ardent male pursuers. He points out that the feigned death behavior is the first observed in a dragonfly, but suggests it likely occurs with other [species](#) with females that go it alone after laying their eggs.

More information: Rassim Khelifa. Faking death to avoid male coercion: extreme sexual conflict resolution in a dragonfly, *Ecology* (2017). [DOI: 10.1002/ecy.1781](https://doi.org/10.1002/ecy.1781)

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