

**SCOOP!**



# The incredible **JUMPING SPIDER MIMIC MOTH**

A STUNNING ENCOUNTER  
IN THE FORESTS OF ASSAM  
WITH A TINY MOTH  
WHICH MIMICS TO PERFECTION  
ITS DEADLIEST PREDATOR



The eye- and leg-like patterns appearing on the raised wings of *Brenthia mimic* to stunning perfection the frontal appearance of its worst enemy - a Jumping spider.



The defensive strategy of Brenthia includes rotating on its own axis with fast, irregular moves - imitating to perfection the jerky movements of a roving Jumping spider. All the individuals we observed were 5-8mm wide.

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As we slowly advanced along the well-maintained forest trails of the Hollongapar Gibbon Wildlife Sanctuary in Assam, North-eastern India, my attention was drawn to several queer-looking, tiny Jumping spiders which appeared to be rotating jerkily - as most of the members of this tribe do - on the exposed upper surface of many large leaves. Yet there was something strange about these spiders, an ever-so-slight difference which appeared to set them apart from the other innumerable *Salticidae* species which we were encountering with regularity in that same wonderful, virgin habitat. Bending among the thick bushes and vines to take a closer, better look, I found myself speechless with surprise - this was no Jumping spider, this

was a tiny day moth which - seen exactly from the front and at eye level, ie from the point of view of a roving Jumping spider in search of prey - looked exactly like a Salticid thanks to the leg-like and eye-like bright patterns drawn on its wings, which were kept raised and fully spread. To fully implement its incredible act of mimicry, the moth - which I found later to be an unidentified species of the so-called Metalmark moths belonging to the genus *Brenthia* - regularly turned on its axis, exposing its set of wings with a series of jerky, fast postures which imitated to perfection the toy-like movements of Jumping spiders. Closer examination showed also that the eye-like and leg-like pattern is repeated, with some subtle variation - on the

lower/back side of the raised wings of the moth, so that the optical illusion of a hunting Jumping spider is offered both from the front and from the back. As a typical prey of Salticids - incredibly fast predators which catch their prey with a well-aimed jump from a distance - our *Brenthia* had clearly evolved a most amazing defensive strategy: it looks like its worst enemy (which by the way happens to dislike the members of its own kind) to avoid becoming its prey. One word of advice - to fully appreciate the extraordinary effectiveness of its mimicry, look at the photos published in these pages as you squint, or from a little distance: in brief, look at them through a Jumping spider's eyes. And be prepared to be amazed at our *Brenthia's* incredible trick!



The Jumping spider mimicry is repeated - albeit with some subtle differences - on the lower/back side of the wings, offering an effective defense from attacks coming from the rear.

A comparison of two different *Brenthia* sp. specimens and two Salticidae sp. Jumping spiders observed in the same habitat and environment, the Hollongapar Gibbon Wildlife Sanctuary in Assam, North-eastern India. The effectiveness of the unique defensive strategy of *Brenthia* is unquestionable.



■ The mimicry evolved by *Brenthia* sp. works best when faced from the front and at the same level - the point of view of a roving Jumping spider. A view from the top - at far right - shows quite clearly the raised, front-facing position of its four wings normally adopted by *Brenthia* sp. when resting in the open on top of a leaf.

