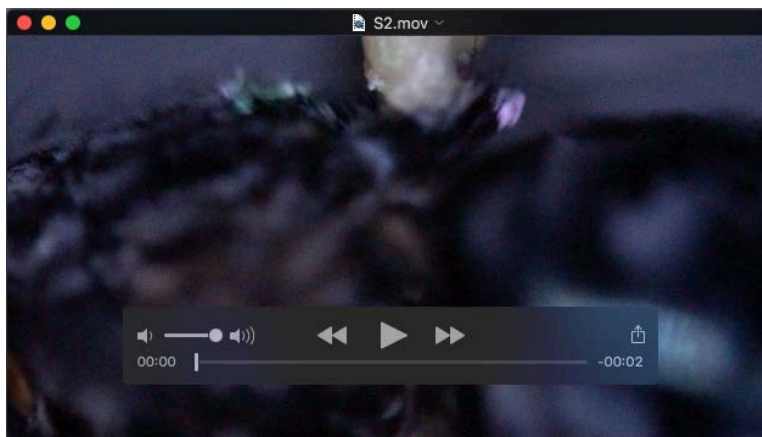


## Supplementary movies



**Movie 1** Female bowfly tethered elastically at the scutellum. When touched at the wing the fly starts flying.



**Movie 2** The detail shows the opposite movements of the mesonotal sclerites of the fly. With slow motion video recording (100 frames per second) the movements of the fly are slowed down when played back with 25 Hz making the opposite movements of the scutellum and scutum visible. When the scutellum, marked by a pink spot, moves downwards the scutum, marked by a green spot, moves upwards and the reverse, like a teeter.