

## Supplemental Movie Legend

**Movie S1.** Observation of the gall formation using time-lapse photography. *Nicotiana benthamiana* with the first day galls were placed in a rearing case and photographed using Camera Module v.2.1 connected to Raspberry Pi 3 Model B (Raspberry Pi Foundation) [Growth condition: temperature 28 °C in the long day regimen (14L10D)]. Photographs were taken every 10 minutes using an original source code written in shell script. The acquired images were used to create a movie consisting of 60 frames per second using Spyder ver. 4.15 (<https://www.spyder-ide.org>) and FFmpeg (<https://www.ffmpeg.org>).

**Movie S2.** Digital video tracking of *S. madaranus* locomotor activity. Weevil behavior was recorded using a Raspberry Pi camera for 5 min. The video is 20 times faster than the actual speed. The behavioral traces were overlaid with an original script written in the R language based on the tracking data. Ovipositor-sealed and control groups are shown in red and blue, respectively.