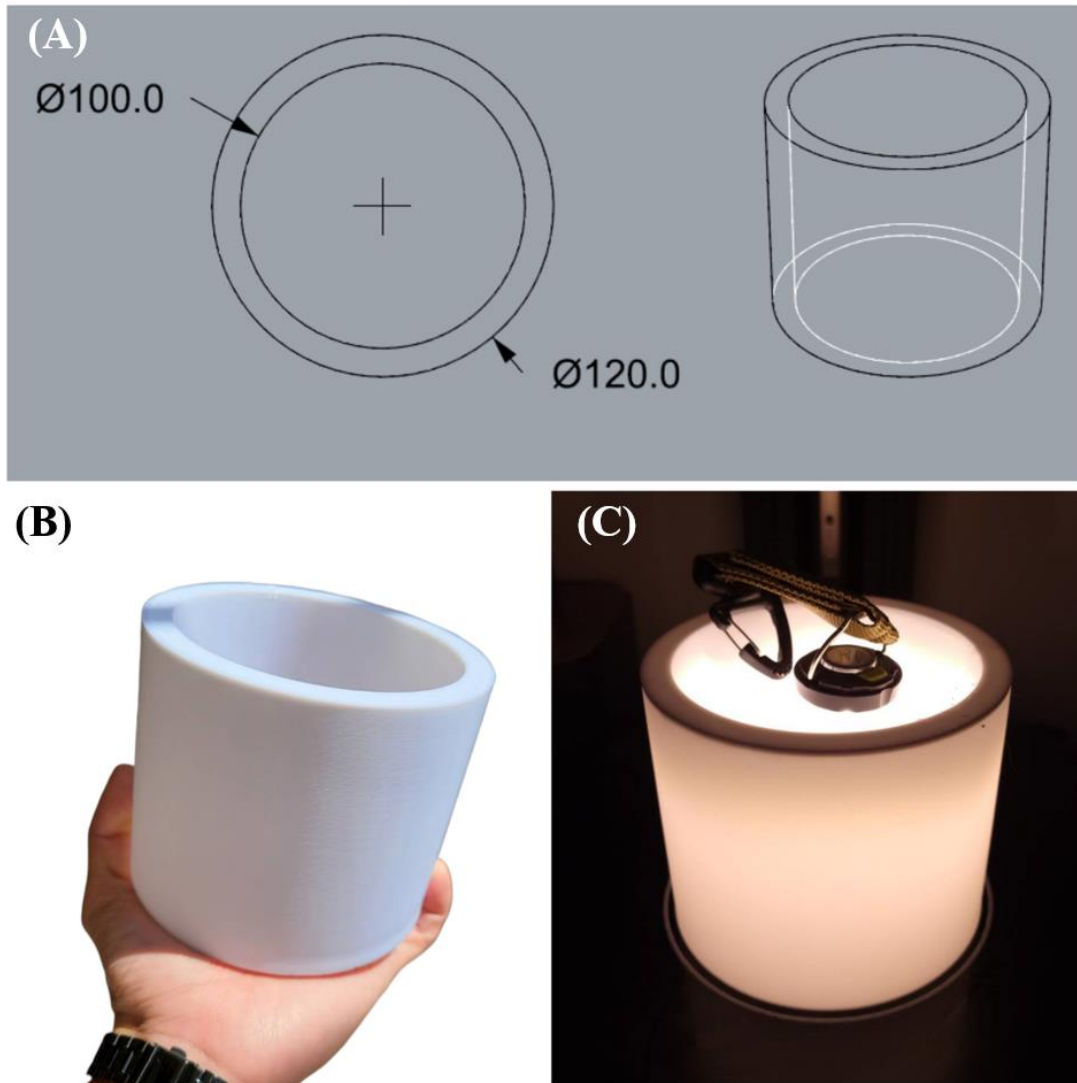
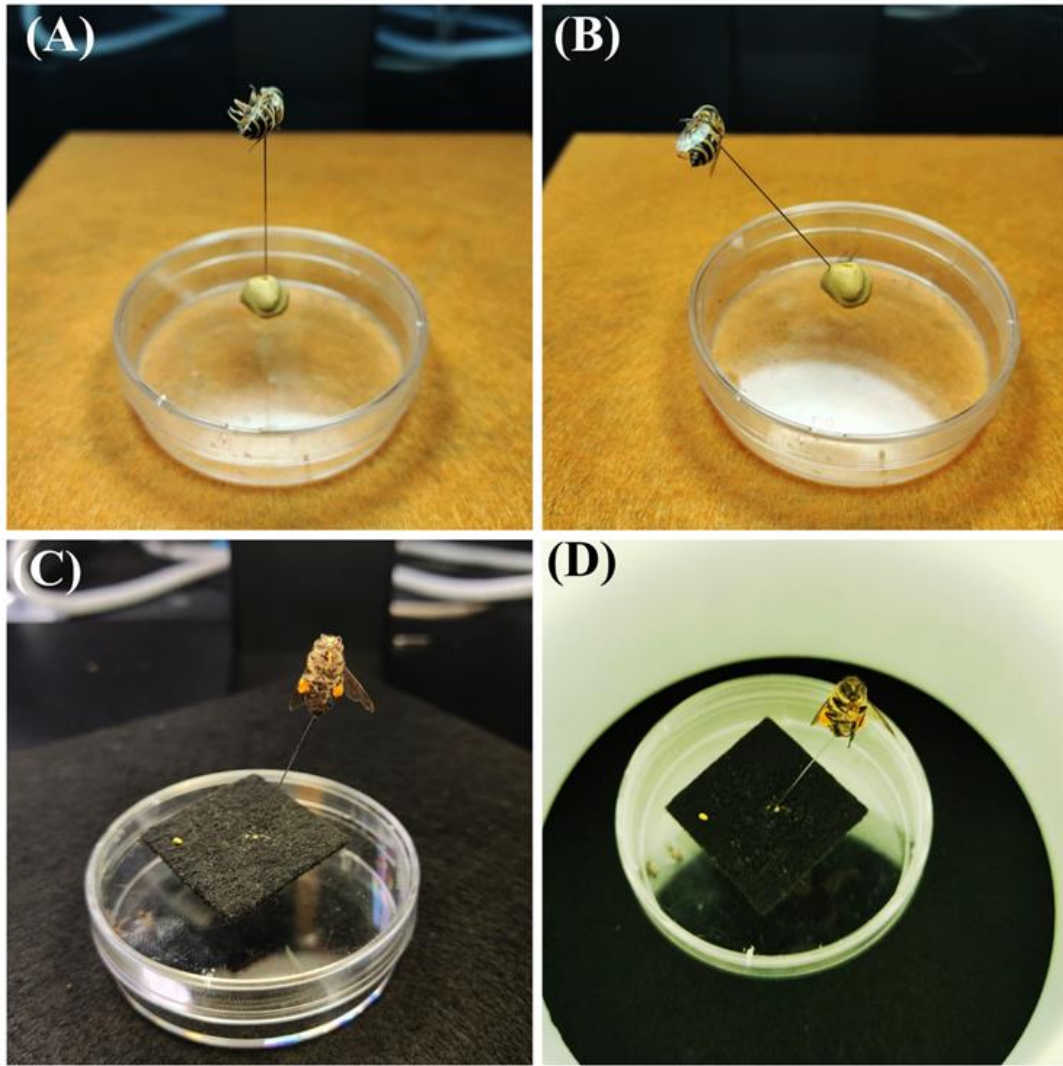


**Figure S1.** The used macro and microscopic objective lenses for macro photography in this study. **(A)** Macro conversion lenses of DCR-150 and DCR-250 were stacked and used together via adapters (25-37-43mm and 49-43mm). **(B)** The macro conversion lens of MSN-202 or MSN-505 was mounted to the FACE system via a 25-37mm thread adapter. **(C)** HC Plan 4× or **(D)** HC Plan 10× microscopic objectives were mounted to the FACE system via an M25 to RMS thread adapter.

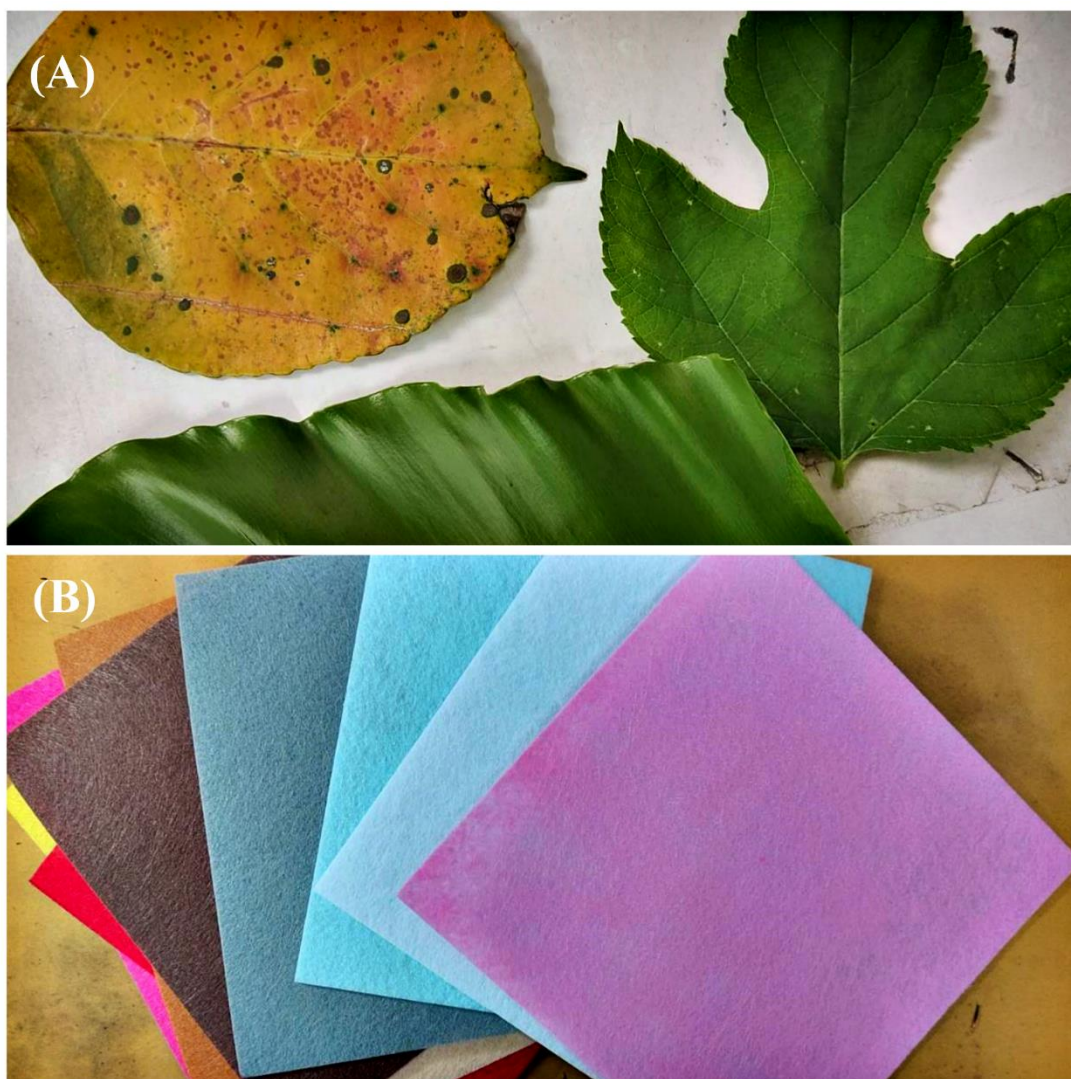


**Figure S2.** A 3D printed diffusion tunnel used in this study. **(A)** The dimensional detail of diffusion tunnel (unit in mm). **(B)** The outline of the double-layered diffusion tunnel is 3D-printed using acrylonitrile butadiene styrene material with 1.3mm thickness. **(C)** A flashlight was inserted into the center of the diffusion tunnel, showing that uniform illumination could be achieved through the diffusion tunnel.



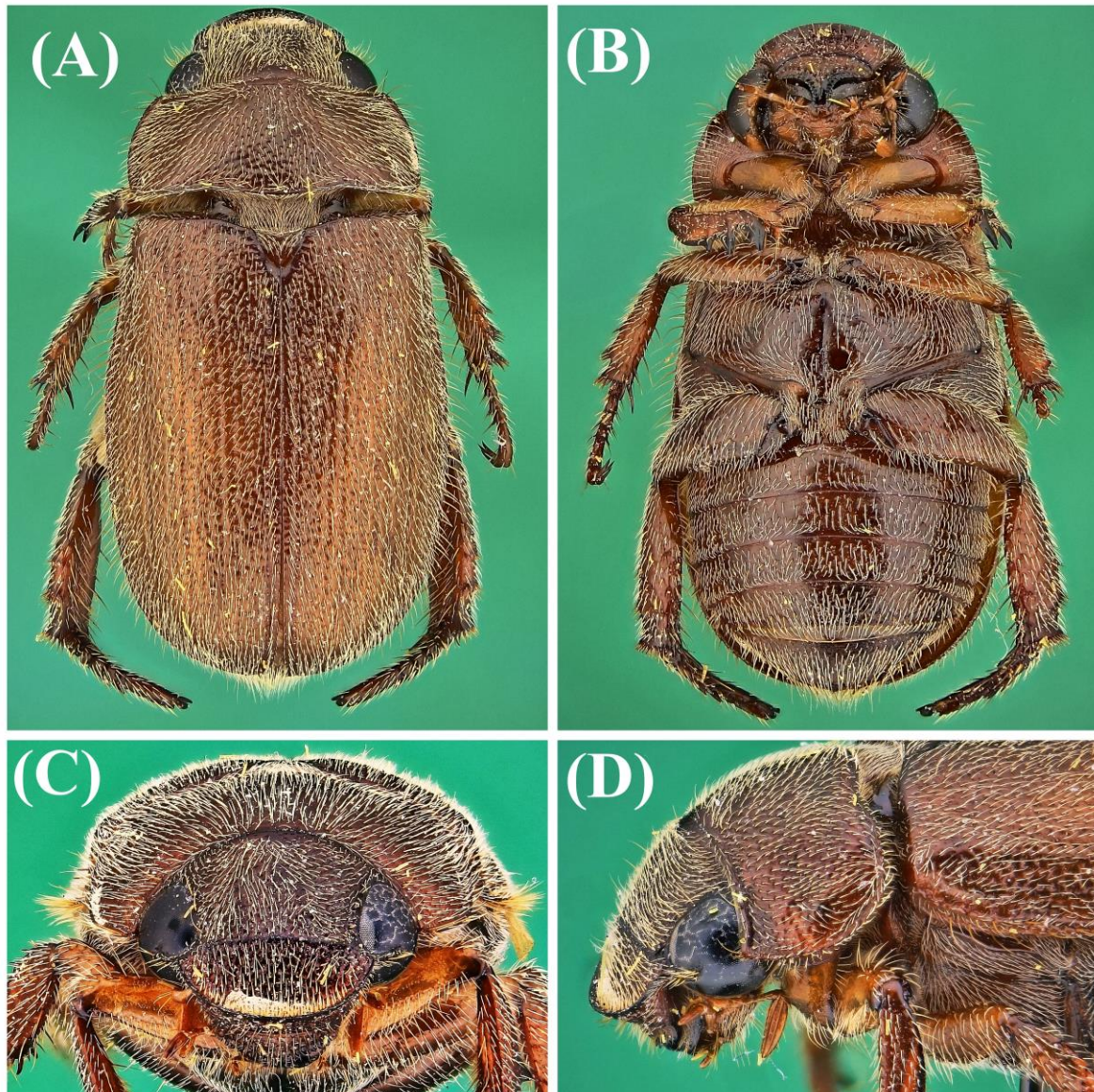
**Figure S3.** Materials used to position objects. Insect pins of 0 or 00 sizes were used to adjust the object position. **(A)** For the lateral view, an insect pin was inserted into the subject (honeybee) in the thorax position, and the other end was embedded in clay. **(B)** The insect position could be finely adjusted by moving the insect pin at different angles. **(C)** For the frontal view, an insect pin could be inserted into the subject from the posterior end of the abdomen, with the other end embedded in clay. To change the background, a piece of black color non-woven fabric was used. **(D)** The outlooks of the subject placed in the center of the diffusion tunnel.





**Figure S4.** Materials used to conduct background replacement. (A) Natural materials like leaves with either yellow or green color. (B) Non-woven fabric materials with different colors.





**Figure S5.** Image stacks for *Adoretus formosanus* generated by using FACE setup. (A, B) Dorsal and ventral view images of *Adoretus formosanus* stacked from 150 images, with 1× magnification. (C, D) Frontal and lateral view images of *Adoretus formosanus* head stacked from 150 photos captured by the FACE system with 1.5× magnification.

**Video S1. Live stack for lynx spider by using FACE setup.** A 13-sec video with 390 image frames was captured from a live lynx spider (*Oxyopes salticus*). Later, the video was extracted into an individual image and stacked by Helicon Focus to produce an extended focus image (video is also available at <https://www.youtube.com/watch?v=nU-aOqY1XtM>).

**Video S2. Standard operation protocol for FACE method.** A short footage showing the entire procedure to conduct macro photography by using FACE method (video is available at <https://www.youtube.com/watch?v=O1nItC1ZgoY>).