

## Description of Additional Supplementary Files

### File Name: Supplementary Movie 1

**Description:** Isolating a parasitoid from a fossilized puparium. Virtual cut of a mineralized fly puparium (NRM-PZ Ar65720) and digital isolation of the concealed parasitoid wasp (volume rendering).

### File Name: Supplementary Movie 2

**Description:** From tomography data to illustration. The surface reconstruction of a female *Xenomorphia resurrecta* (NMB F2875) is rearranged and artificially colored in order to provide a true-to-life impression of the specimen, which is shown ovipositing into a puparium (derived from NRM-PZ Ar65767).

### File Name: Supplementary Data 1

**Description:** 3D PDF of female *Xenomorphia resurrecta*. Interactive 3D surface model of a *X. resurrecta* female (NMB F2875). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 2

**Description:** 3D PDF of male *Xenomorphia resurrecta*. Interactive 3D surface model of a *X. resurrecta* male (NRM-PZ Ar65720) including host parts. Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 3

**Description:** 3D PDF of female *Xenomorphia handschini*. Interactive 3D surface model of a *X. handschini* female (NMB F3042). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 4

**Description:** 3D PDF of male *Xenomorphia handschini*. Interactive 3D surface model of a *X. handschini* male (NMB F2543). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 5

**Description:** 3D PDF of female *Coptera anka*. Interactive 3D surface model of a *C. anka* female (NRM-PZ Ar65897). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 6

**Description:** 3D PDF of male *Coptera anka*. Interactive 3D surface model of a *C. anka* male (NMB F3154). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).

### File Name: Supplementary Data 7

**Description:** 3D PDF of female *Palaeortona quercyensis*. Interactive 3D surface model of a *P. quercyensis* female (NMB F2770). Click on the figure to start interactive 3D view; switch between views by using the menu (Adobe Reader required).