

SUPPLEMENTAL FIGURES FOR:

Kons, Hugo L. Jr. & Robert J. Borth. 2015. A New Species of *Catocala* (Lepidoptera: Noctuidae) from the Southeastern United States. Bulletin of the Peabody Museum of Natural History 56(1): 55-65.

SUPPLEMENTAL FIGURE 1. Adults of *Catocala myristica* and similar species.

A: *Catocala myristica* holotype male (dissection No.: 2010HLK:727, DNA No.: 5161-270608-MS).

B: *C. myristica* female (dissection No.: 2011HLK: 1570).

C: *C. myristica* male (DNA No.:5160-270608-MS).

D: *C. robinsonii* male (DNA No.:4050-COI-08), Indiana, Posey County.

E: *C. myristica* female (dissection No.:2010HLK:731, DNA No.:5162-270608-MS).

F: *C. robinsonii* female (dissection No.:2010HLK:734, DNA No.: 5129-260808-IN), Indiana, Posey County.

G: *C. myristica* male (DNA No.:5176-300608-MS).

H: *C. robinsonii* male (DNA No.:11-80-170999-SC), South Carolina.

I: *C. angusi* male (DNA No.:4054-COI-08), Indiana, Posey County.

J: *C. flebilis* female, Mississippi, Lee County.

K: *C. myristica* female (ventral) (dissection No.:2010HLK:731, DNA No.:5162-270608-MS).

L: *C. robinsonii* female (ventral) (dissection No.:2010HLK: 734, DNA No.:5129-260808-IN), Indiana, Posey County.



20mm

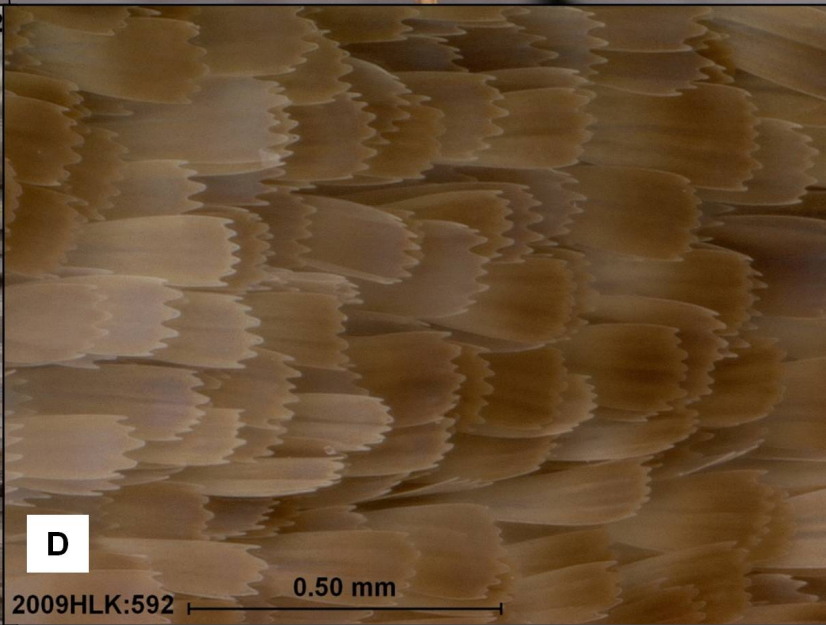
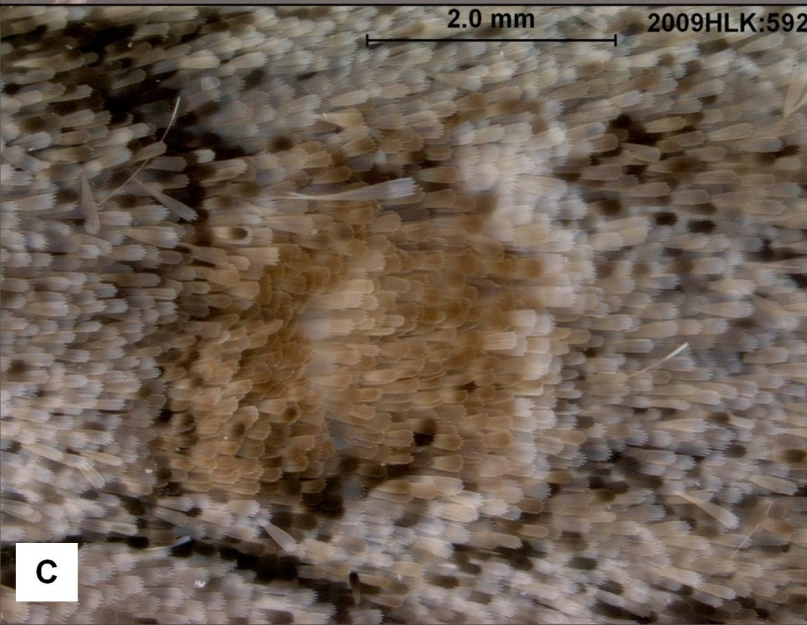
SUPPLEMENTAL FIGURE 2. *Catocala myristica* male head and reniform detail (dissection No.: 2009HLK:592).

A: Head (lateral).

B: Head (Anterior-dorsal).

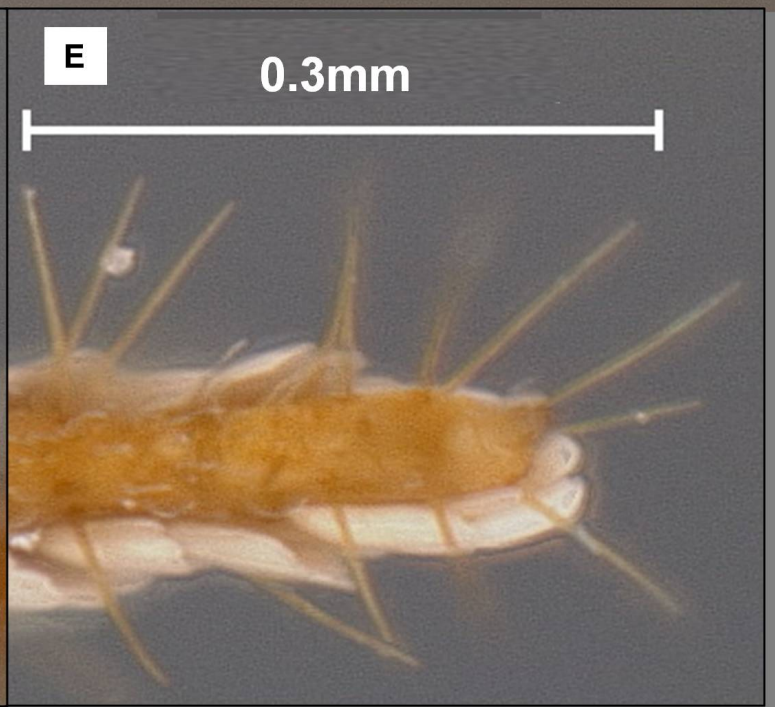
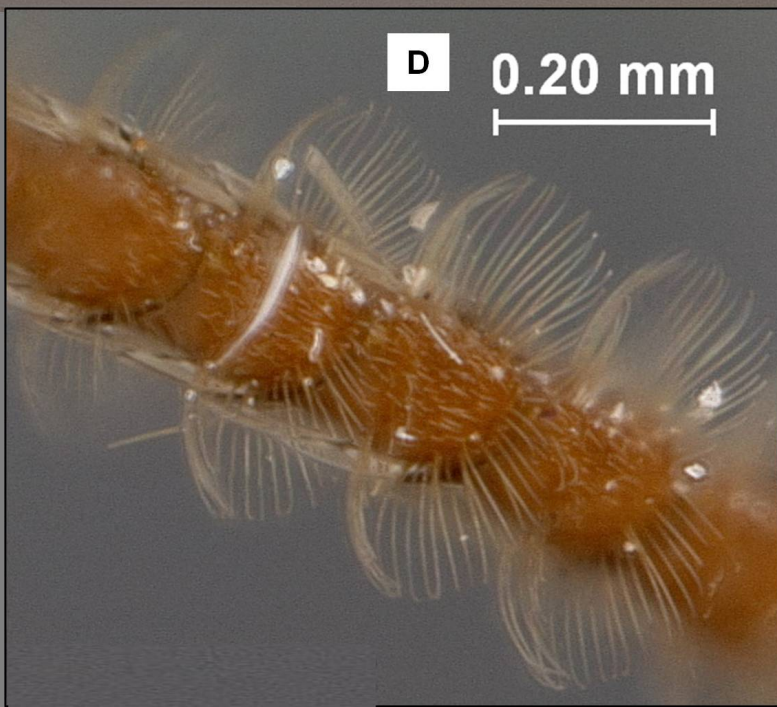
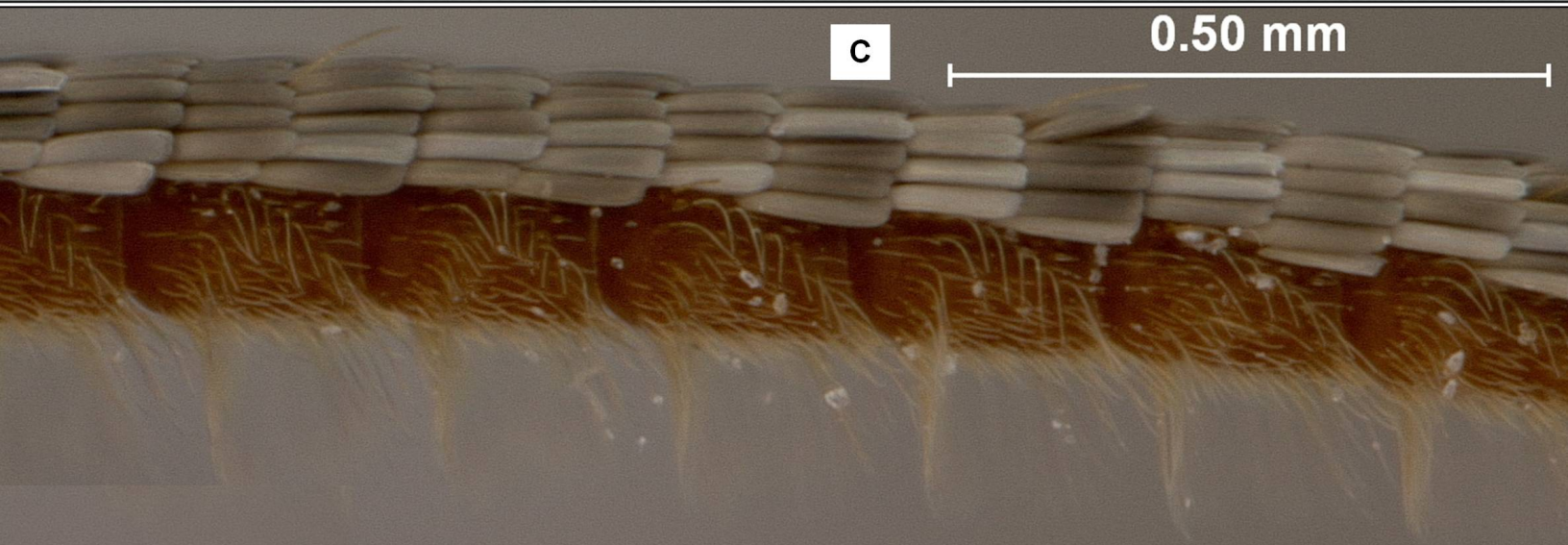
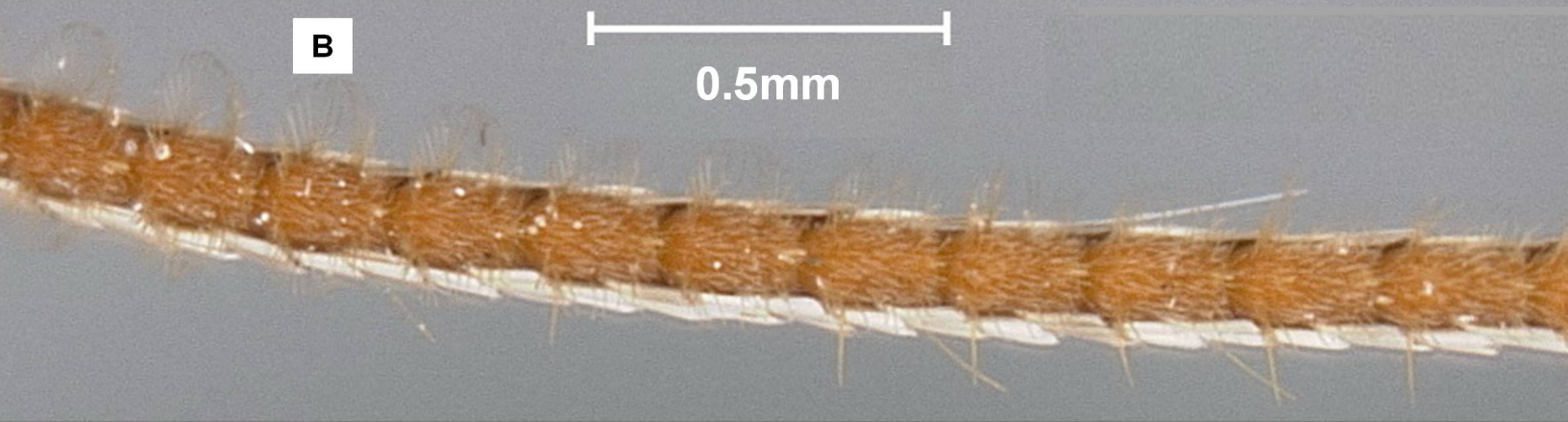
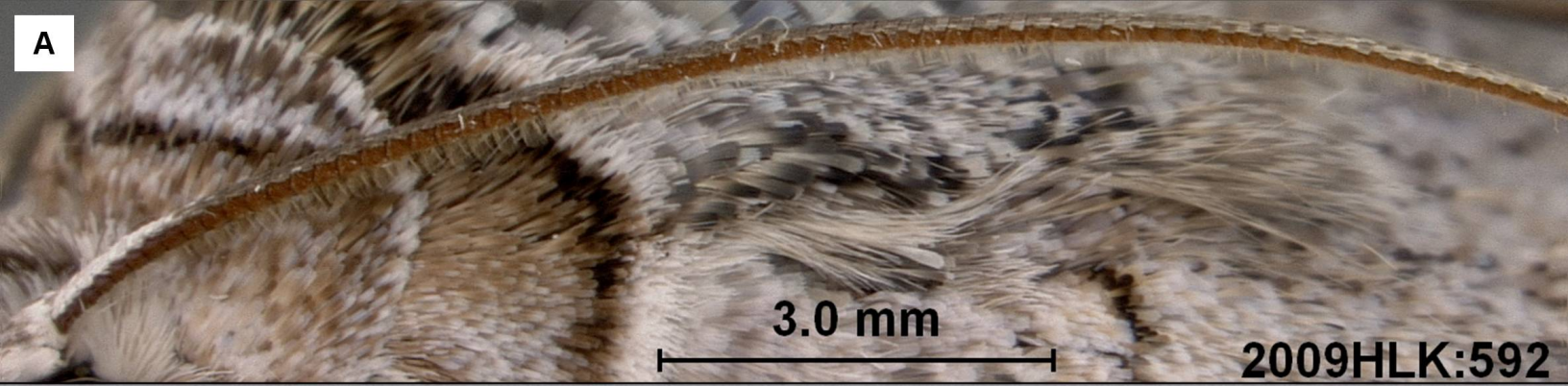
C: Reniform spot.

D: Scales in center of reniform spot.



SUPPLEMENTAL FIGURE 3. *Catocala myristica* male antenna structure (dissection No.: 2009HLK:592).

- A:** Whole antenna except apex (lateral).
- B:** Midsection where spine-like setae begin (ventral).
- C:** Basal section lacking spine-like setae (lateral).
- D:** Basal section lacking spine-like setae (ventral).
- E:** Apex with spine-like setae and no hair-like setae (ventral).



SUPPLEMENTAL FIGURE 4. *Catocala myristica* leg structures [male (dissection No.: 2014HLK:2029), female (dissection No.: 2011:1570)].

- A** Female metatibia (outer).
- B:** Female metatibia (inner).
- C:** Female mesotibia (outer).
- D:** Female mesotibia (inner).
- E:** Female protibia (outer).
- F:** Female protibia (inner).
- G:** Male protibia (outer).
- H:** Male protibia (inner.).
- I:** Female metatarsi (outer).
- J:** Female metatarsi (inner).
- K:** Female mesotarsi (outer/ventral).
- L:** Female mesotarsi (inner/dorsal).
- M:** Female protarsi (outer).
- N:** Female protarsi (inner).
- O:** Female metatarsomere 5 (outer).
- P:** Male distal profemur (with apical spine)/ proximal protibia (outer).



SUPPLEMENTAL FIGURE 5. *Catocala myristica* holotype male genitalia (dissection No.: 2010HLK:727).

A: Capsule (ventral).

B: Capsule (dorsal).

C: Capsule (lateral, before dense hairs removed).

D: Capsule (lateral, with dense hairs removed).

E: Valvae (inner side).

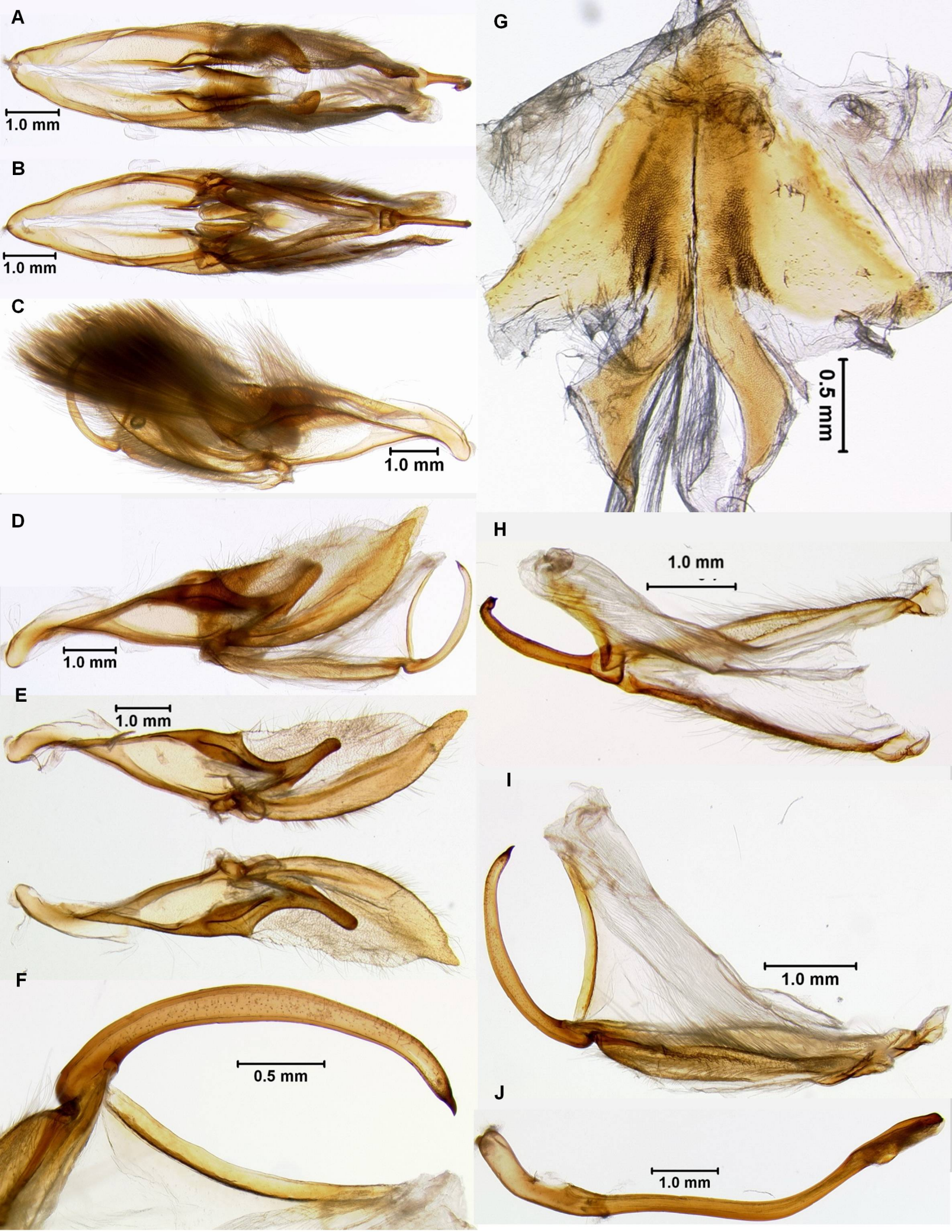
F: Uncus and scaphium (lateral).

G: Juxta/Anellus.

H: Uncus, tegumen, and tuba analis (ventral).

I: Uncus, tegumen, and tuba analis (lateral).

J: Aedeagus (lateral).



SUPPLEMENTAL FIGURE 6. *Catocala myristica* male abdominal cuticle and genitalia (dissection No.: 2014HLK:2029).

A: Abdominal cuticle (dorsum).

B: Abdominal cuticle (ventral).

C: Abdominal cuticle, terminal segment, tergite (left), sternite (right).

D: Ductus ejaculatorius.

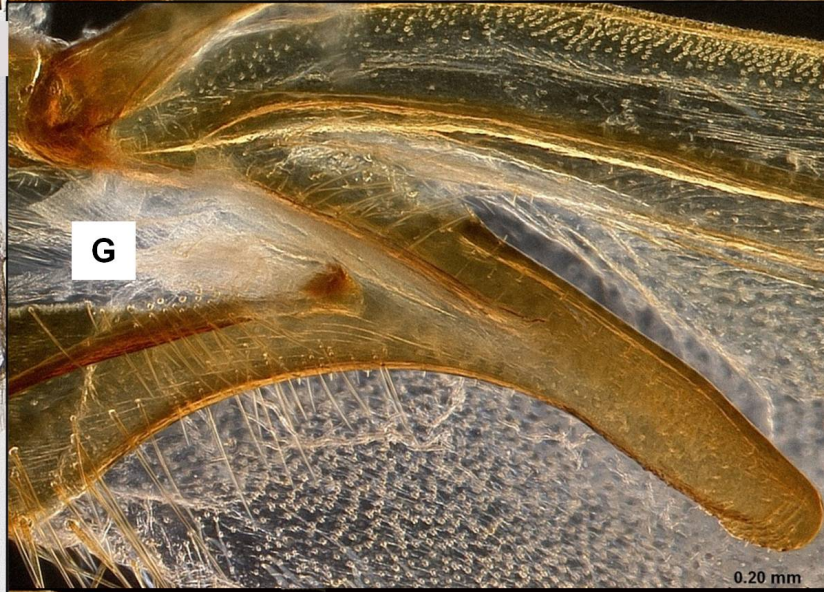
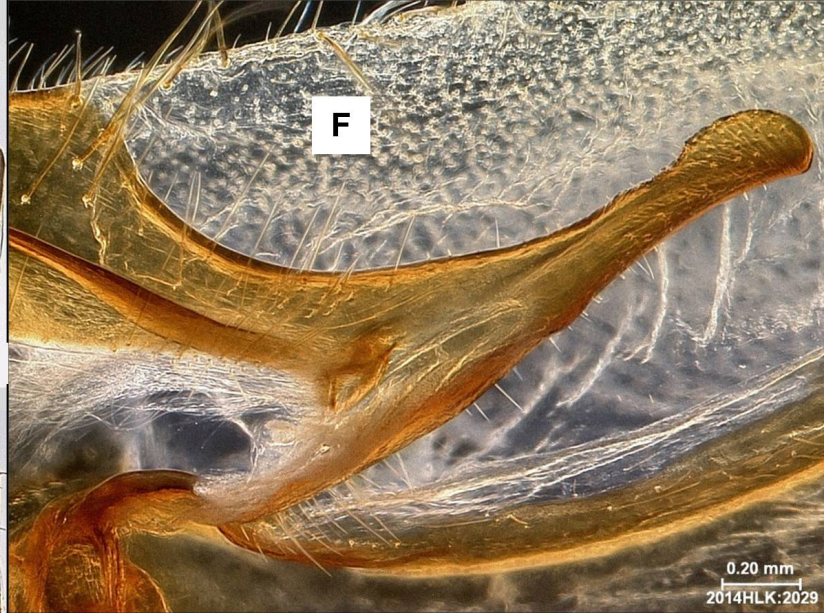
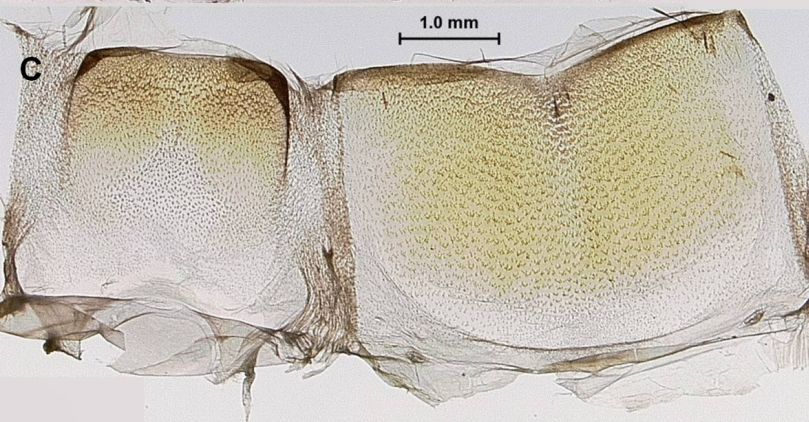
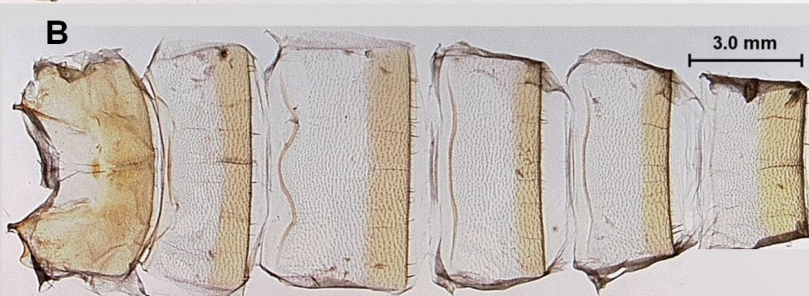
E: Ductus ejaculatorius (opposite side of preceding).

F: Left valve clasper (inner).

G: Right valve clasper (inner).

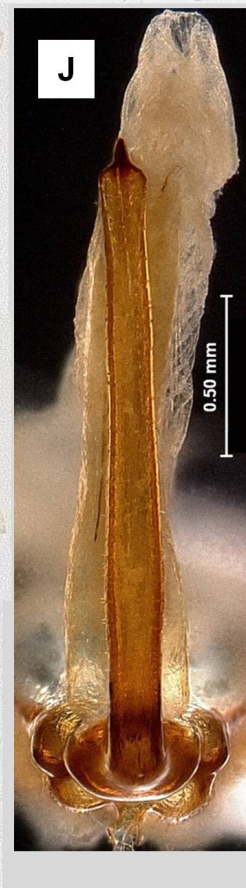
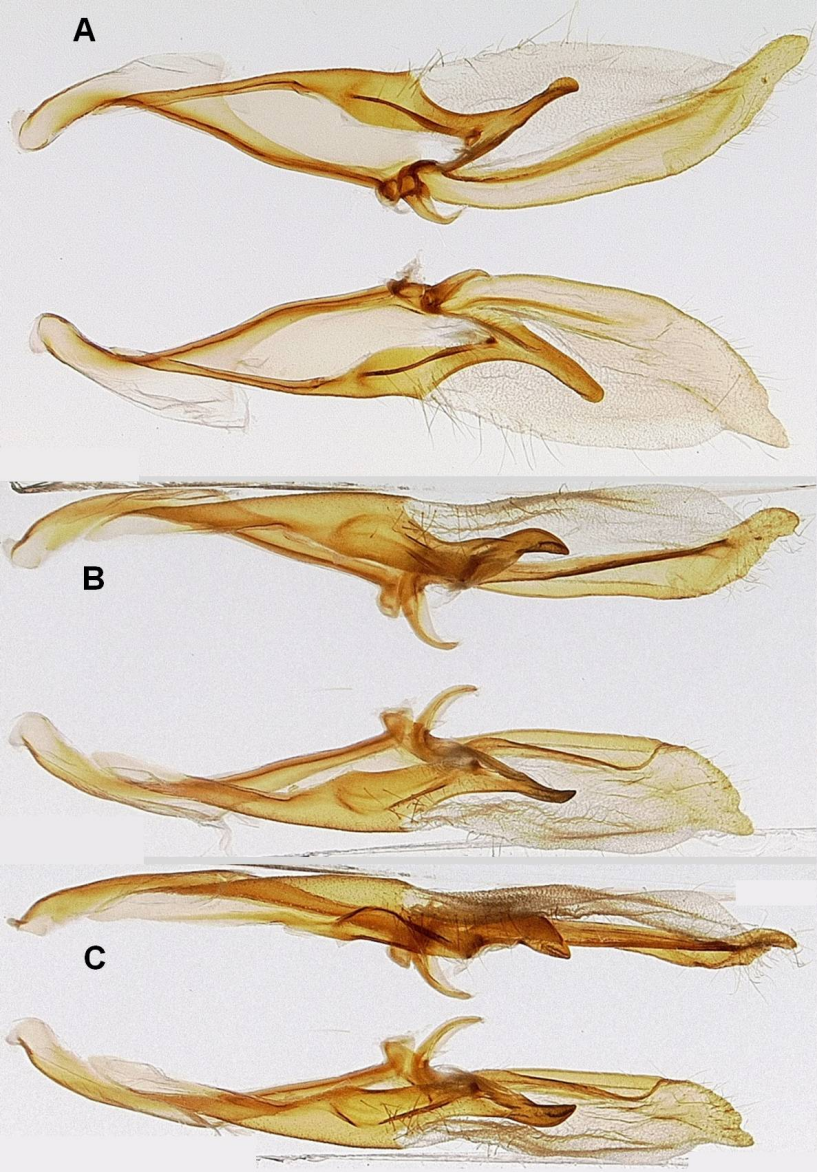
H: Left valve clasper (inner).

I: Right valve clasper (outer).



SUPPLEMENTAL FIGURE 7. *Catocala myristica* male genitalic structures from different angles (dissection No.: 2014HLK:2029).

- A:** Valvae (inner).
- B:** Valvae (inner/ventral).
- C:** Valvae (ventral).
- D:** Valvae (outer).
- E:** Valvae (inner/dorsal).
- F:** Valvae (dorsal).
- G:** Aedeagus (posterior end dorsal).
- H:** Aedeagus (posterior end lateral).
- I:** Aedeagus (posterior end ventral).
- J:** Uncus (posterior).



SUPPLEMENTAL FIGURE 8. *Catocala myristica* everted vesica (dissection No.: 2014HLK:2029) (MGC).

A: Ventral.

B: Lateral (ventral hood above).

C: Dorsal.

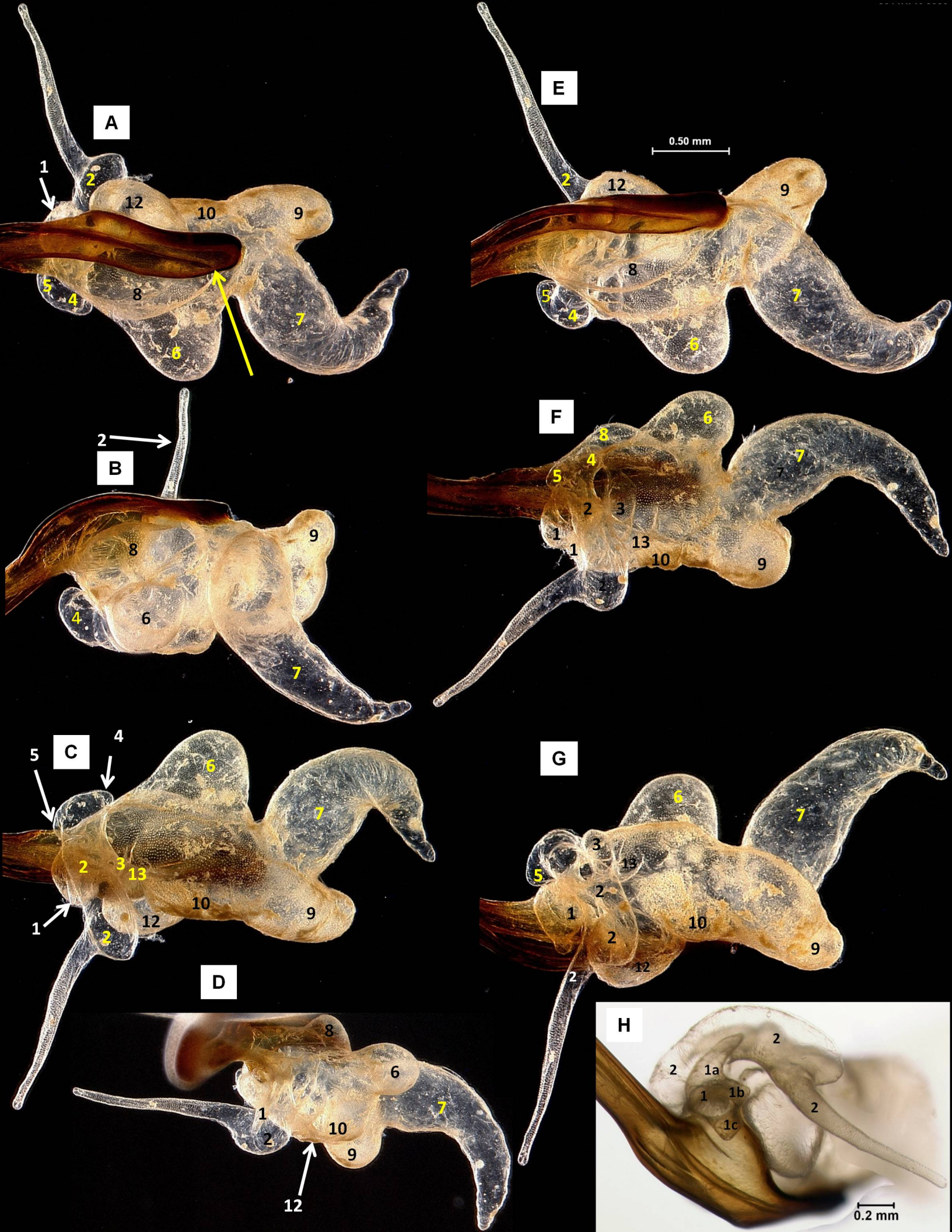
D: Anterior.

E: Ventro-lateral.

F: Dorsal tilted right.

G: Lateral (ventral hood below).

H: Anterior/lateral.



SUPPLEMENTAL FIGURE 9. Comparison of the vesica (dorsal aspect) between *Catocala myristica* (left) and *C. robinsonii* (right).

A: *C. myristica* holotype (dissection No.: 2010HLK:727).

B: *C. myristica* (dissection No.: 2009HLK:516).

C: *C. myristica* (dissection No.: 2009HLK:517).

D: *C. robinsonii* (dissection No.: 2011HLK:1208).

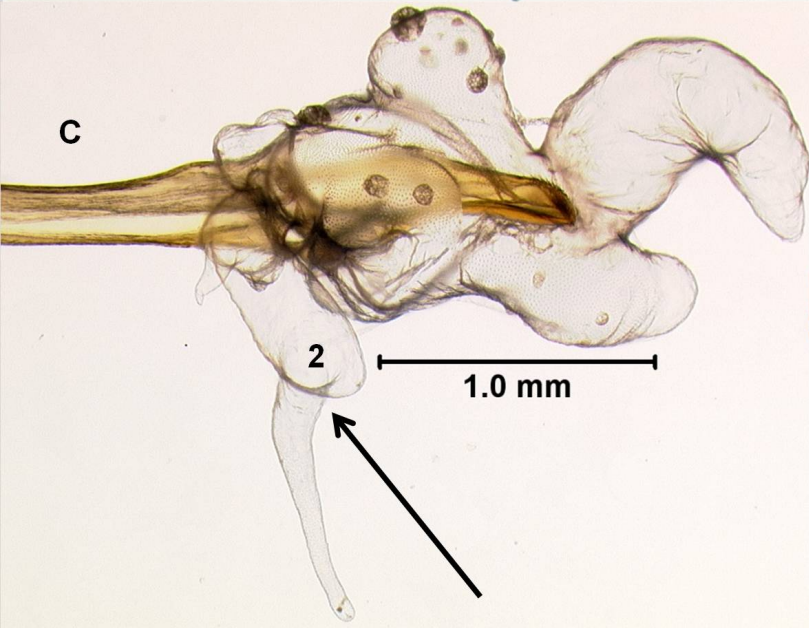
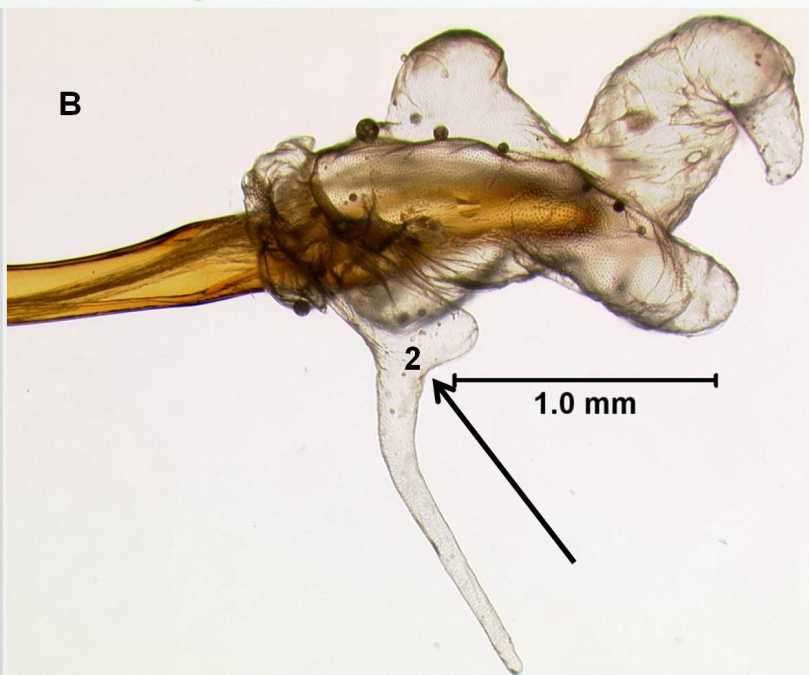
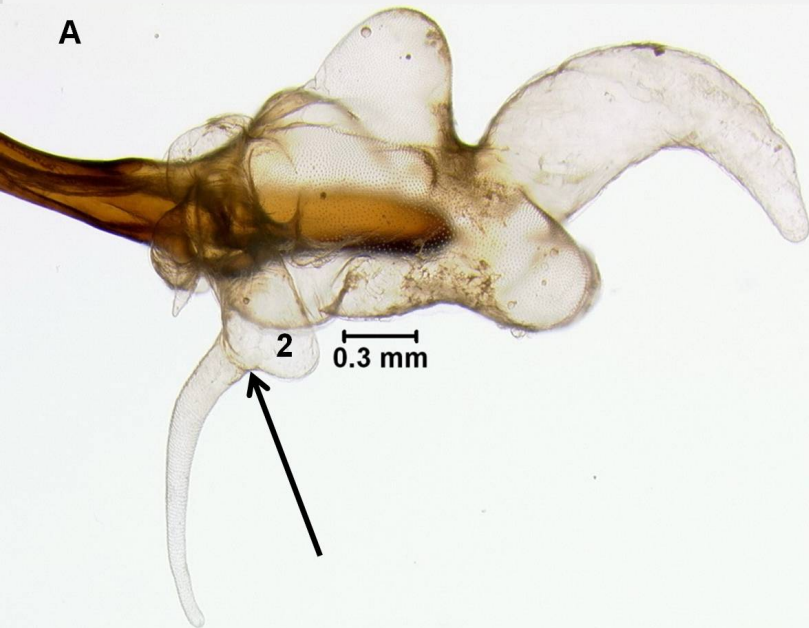
E: *C. robinsonii* (dissection No.: 2011HLK:1209).

F: *C. robinsonii* (dissection No.: 2009HLK:572).

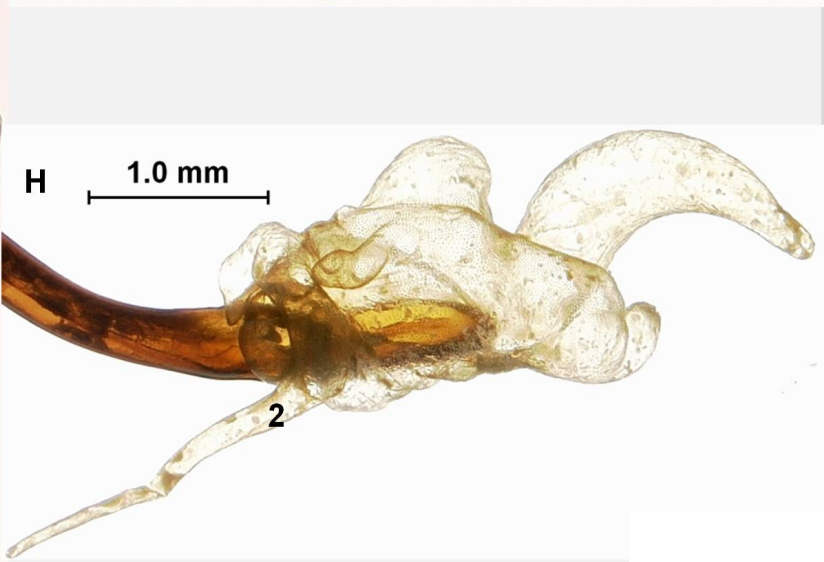
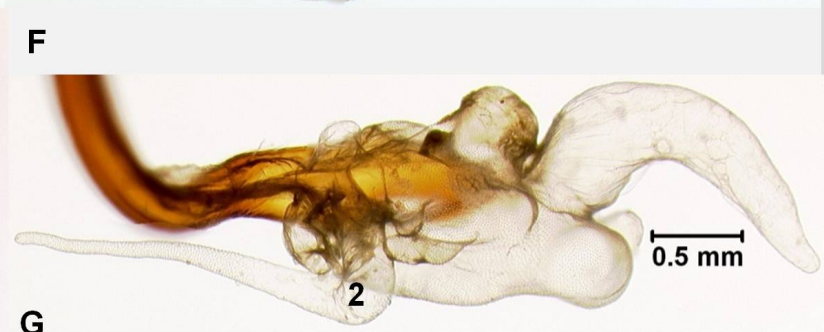
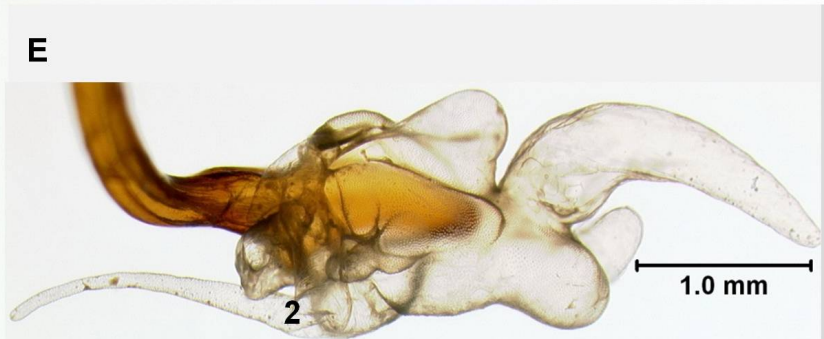
G: *C. robinsonii* (dissection No.: 2009HLK:573).

H: *C. robinsonii* (dissection No.: 2009HLK:571).

Catocala myristica



Catocala robinsonii



SUPPLEMENTAL FIGURE 10. *Catocala myristica* female genitalia (dissection No.: 2011HLK:1570).

A: Ventral.

B: Lateral (ventral left).

C: Dorsal.

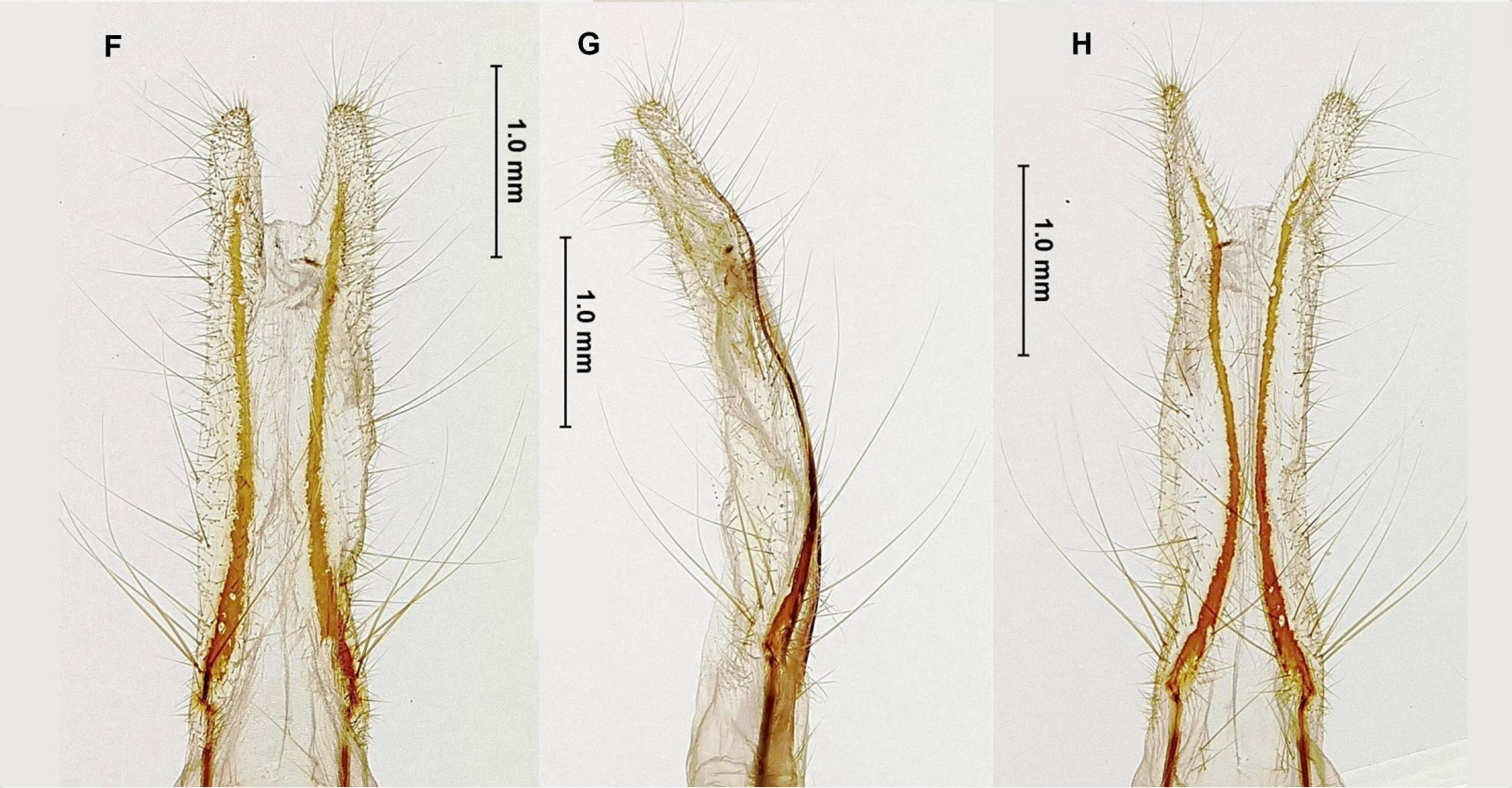
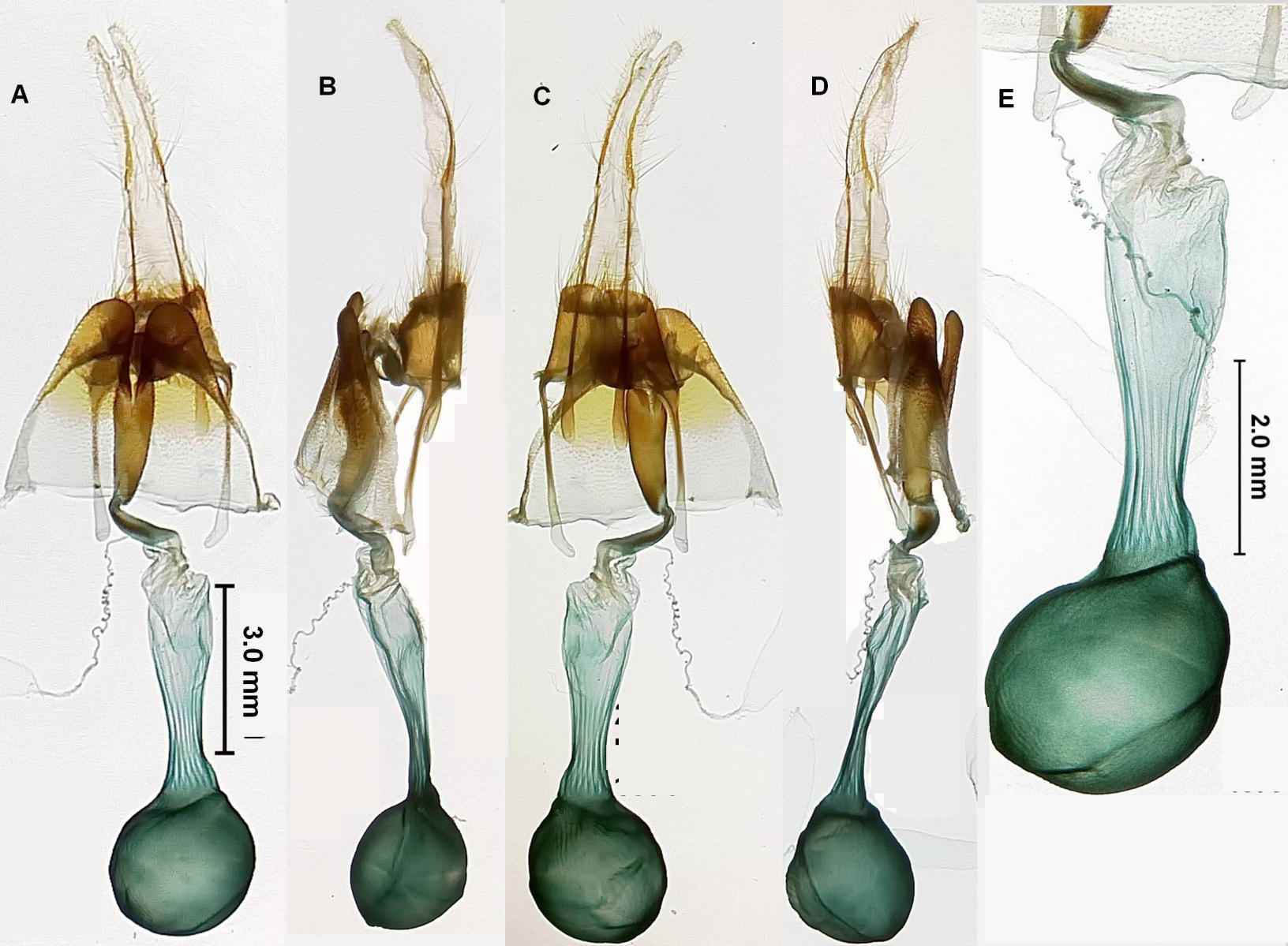
D: Lateral (ventral right).

E: Corpus bursae (ventral).

F: Papillae analis (ventral).

G: Papillae analis (lateral).

H: Papillae analis (dorsal).



SUPPLEMENTAL FIGURE 11. *Catocala myristica* female genitalia and abdominal cuticle (dissection No.: 2011HLK:1570).

A: Lamella antevaginalis + Segment 8 (ventral).

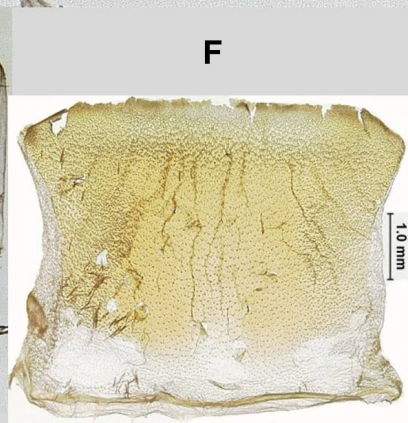
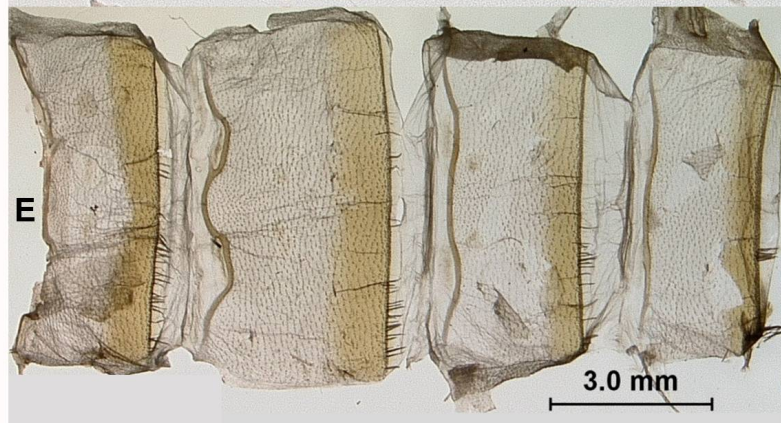
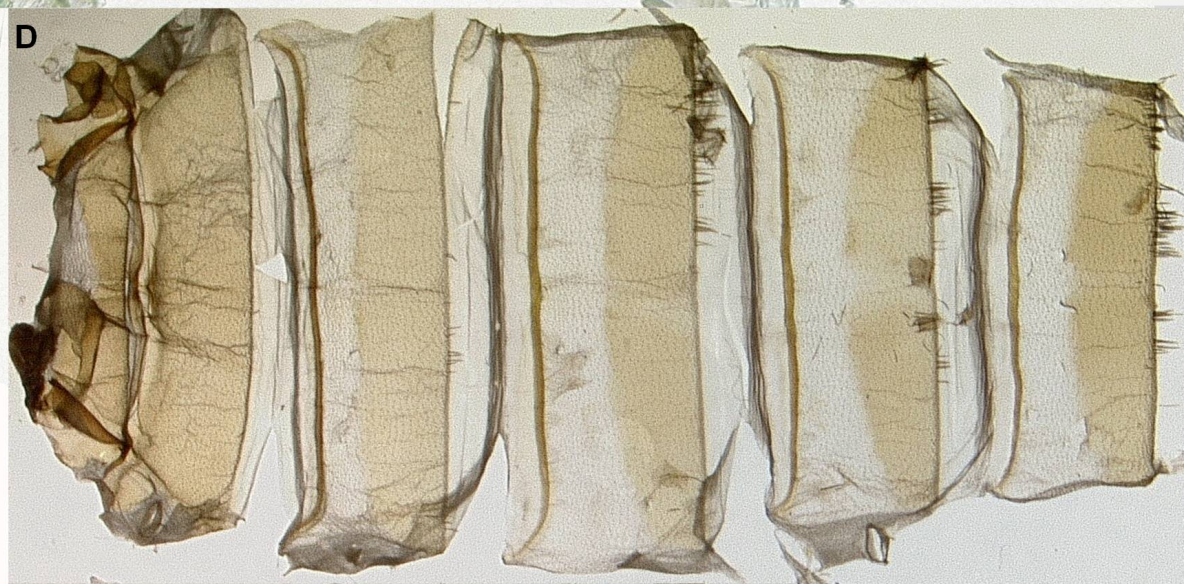
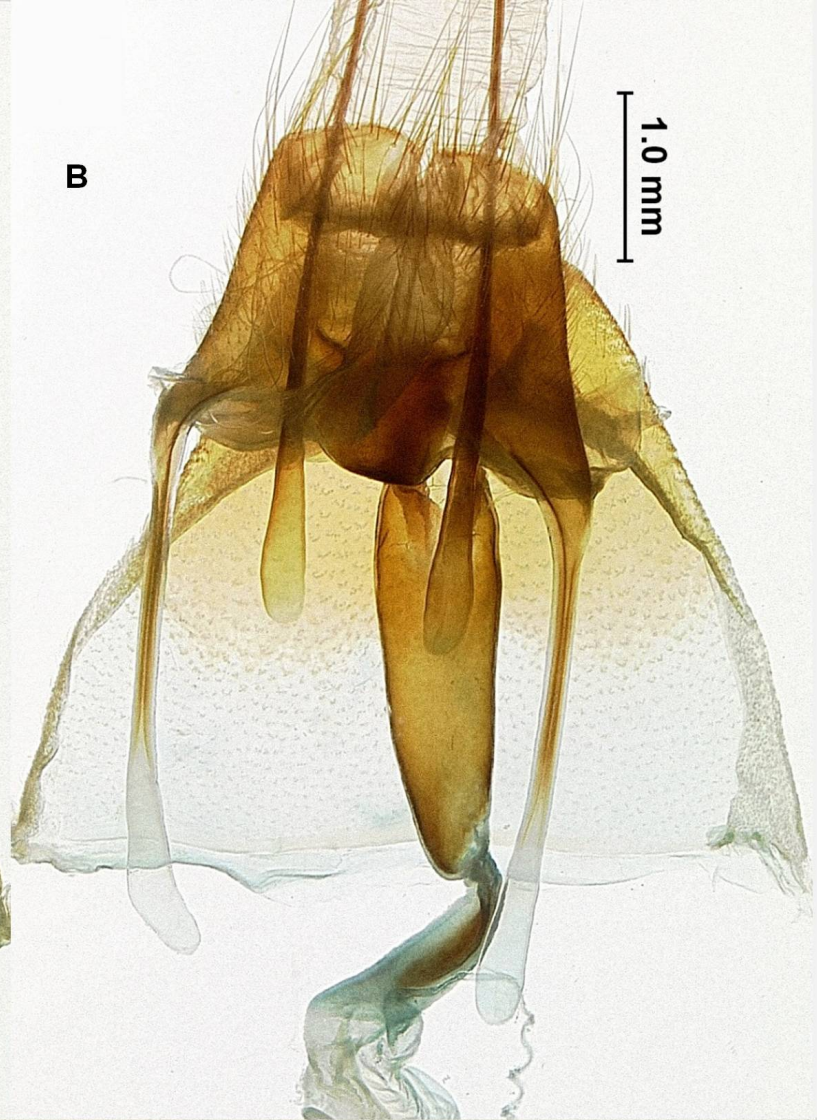
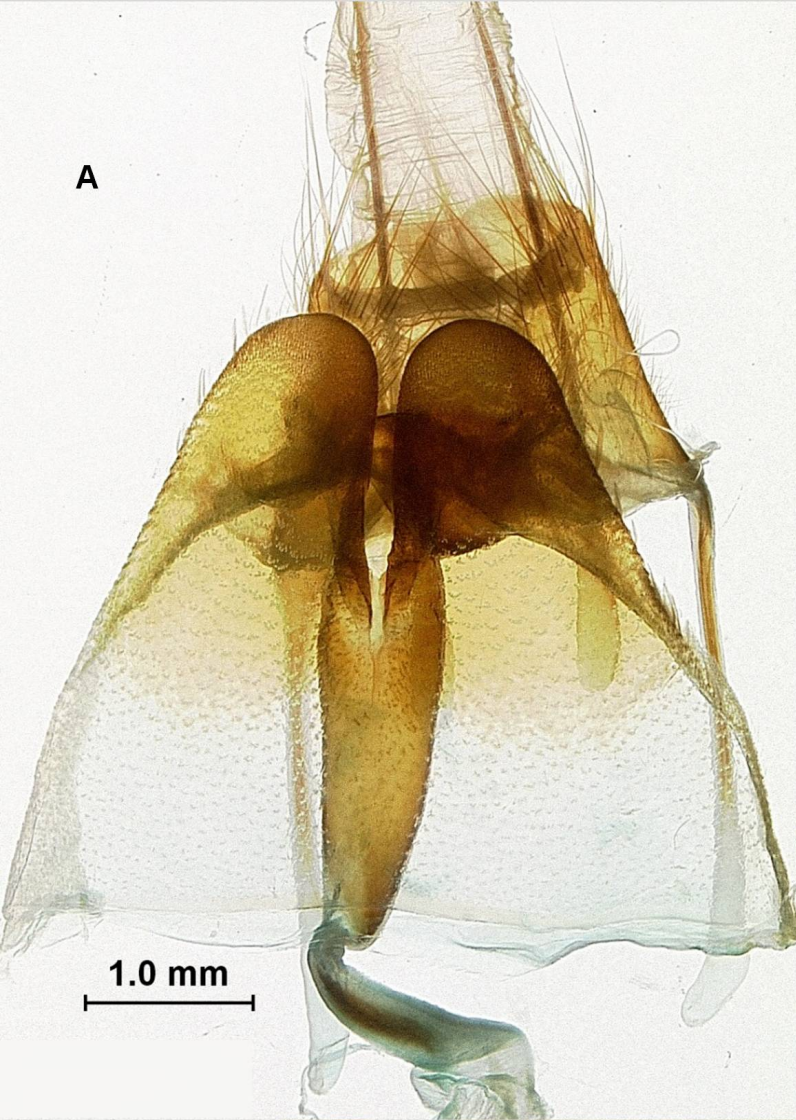
B: Lamella antevaginalis + Segment 8 (dorsal).

C: Lamella antevaginalis + Segment 8 (lateral).

D: Abdominal cuticle (tergites 1-6).

E: Abdominal cuticle (sternites 3-6).

F: Abdominal cuticle (tergite 7).



SUPPLEMENTAL FIGURE 12. *Catocala myristica* ductus seminalis and collateral gland complex (dissection No.: 2011HLK:1570).

A: Ductus seminalis.

B: Collateral gland complex.

C: Vesicle and adjoining canals of spermathecal duct.

D: Utriculus.

E: Lagena.

14.2 mm

