

Figure 24: Pearson correlation between rainfall and flower closing in *A. sessilis*.

(A) Flowers do not closed after 1800 hours.

(B) Flower closed before 1800 hours.

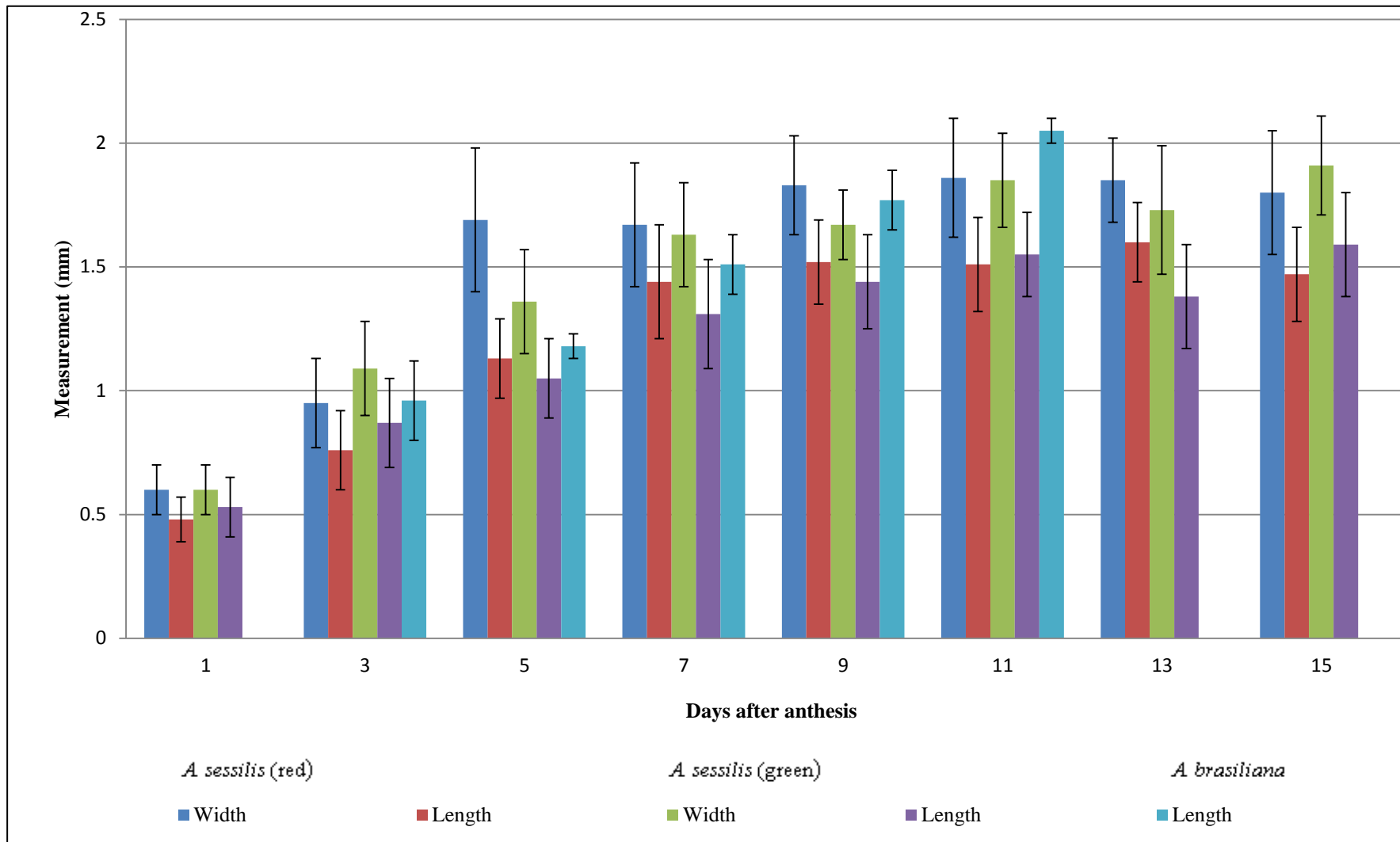


Figure 25: Summary of fruit size in *Alternanthera* species.

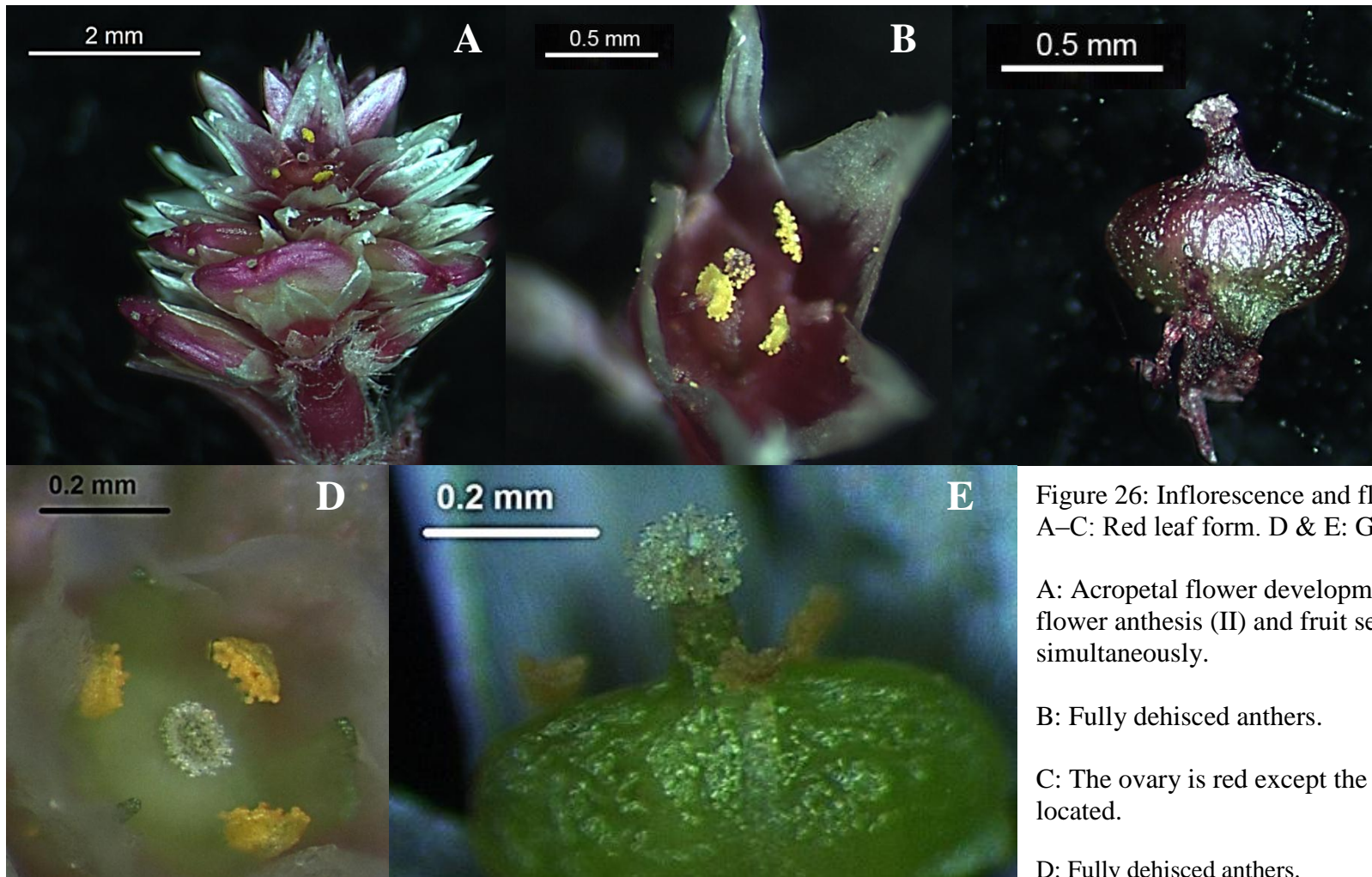


Figure 26: Inflorescence and flower of *A. sessilis*.
 A–C: Red leaf form. D & E: Green leaf form

A: Acropetal flower development. Flower bud (I),
 flower anthesis (II) and fruit set (III) occurring
 simultaneously.

B: Fully dehiscent anthers.

C: The ovary is red except the area where the ovule is
 located.

D: Fully dehiscent anthers.

E: Shiny and wet stigma indicating receptivity.



Figure 27: Flower and fruit development in *A. sessilis*. From left to right: mature fruit, young fruit, anthesis flower, mature bud and young bud.

A: Red leaf form. B: Green leaf form.



Figure 28: Fruit morphology in *A. sessilis*. A–C: Red leaf form; D–F: Green leaf form.

A: Seven days after flower anthesis.

B: 13 days after flower anthesis.

C: 15 days after flower anthesis.

D: Seven days after flower anthesis.

E: 11 days after flower anthesis.

F: 13 days after flower anthesis.

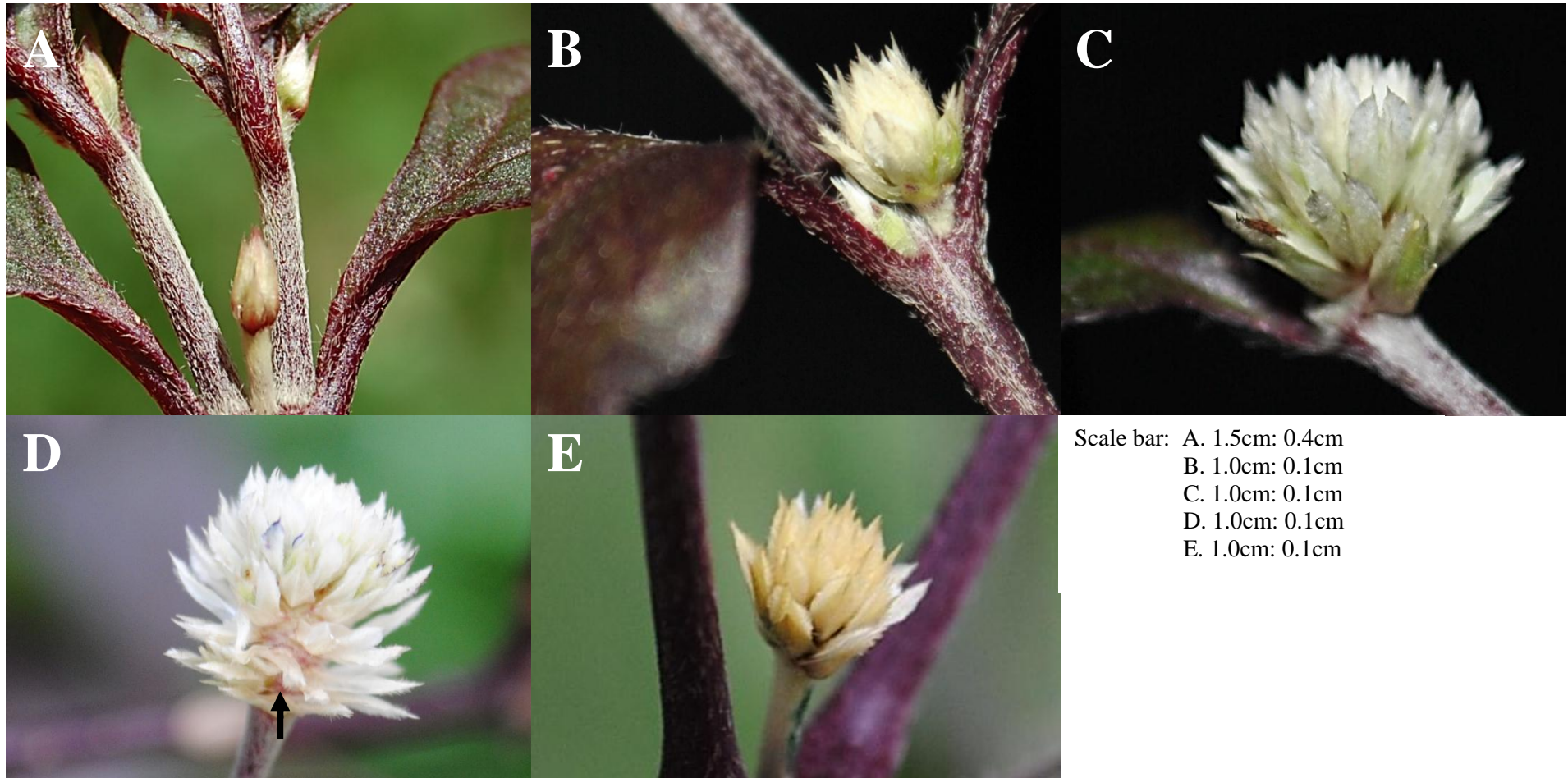


Figure 29: Inflorescence development in *A. brasiliana*.

A: Bud initiation.

B: Young inflorescence with small buds.

C: Young inflorescence without any open flowers.

D: Fruit dispersed leaving bracts attached on the mature inflorescence (indicated by arrow).

E: Degenerated inflorescence.

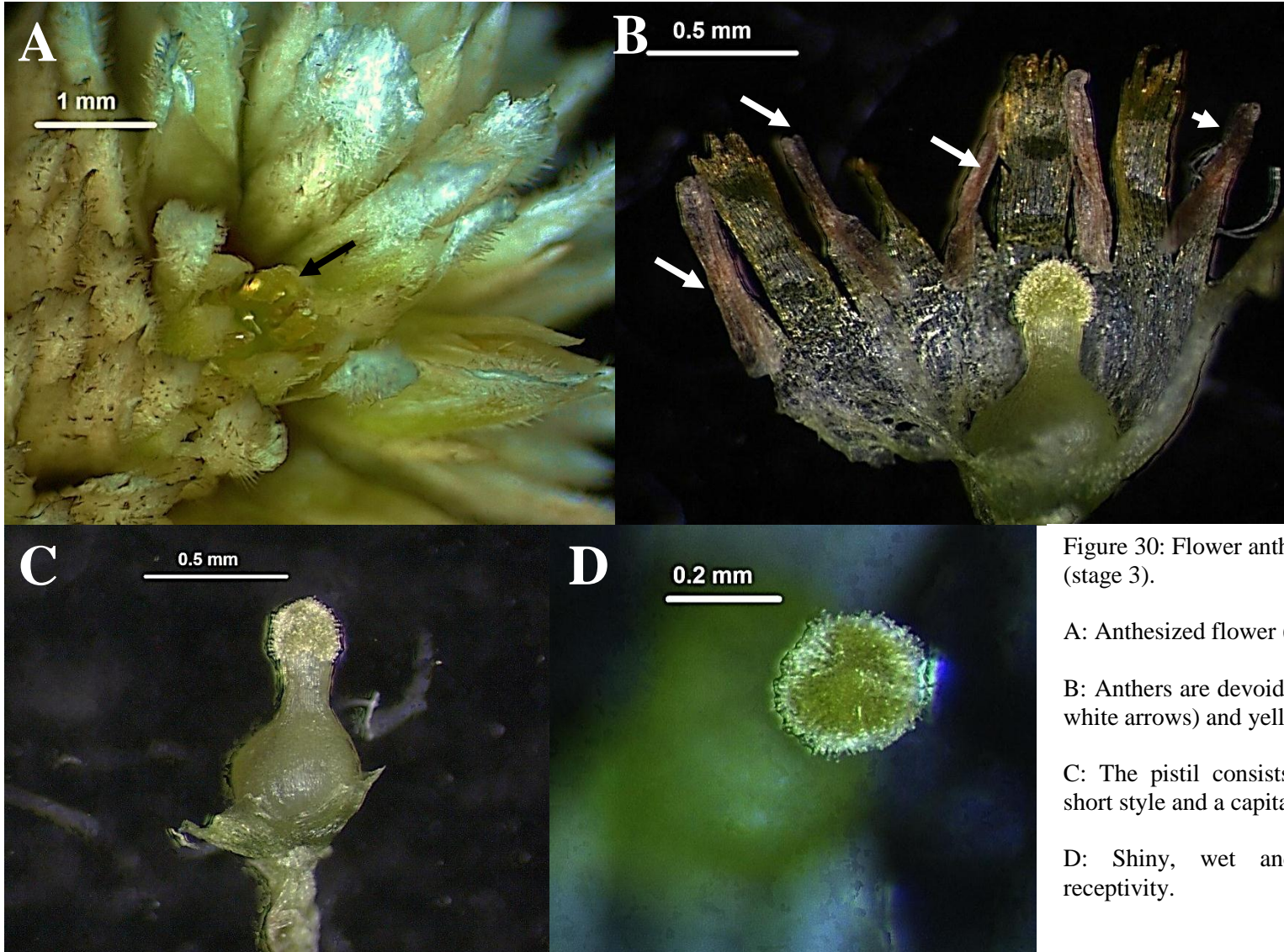


Figure 30: Flower anthesis in *A. brasiliiana* (stage 3).

A: Anthesised flower (indicated by arrow).

B: Anthers are devoid of pollen grains (indicated by white arrows) and yellow pseudostaminodes.

C: The pistil consists of a single obovoid ovary, short style and a capitate stigma.

D: Shiny, wet and green stigma indicating receptivity.

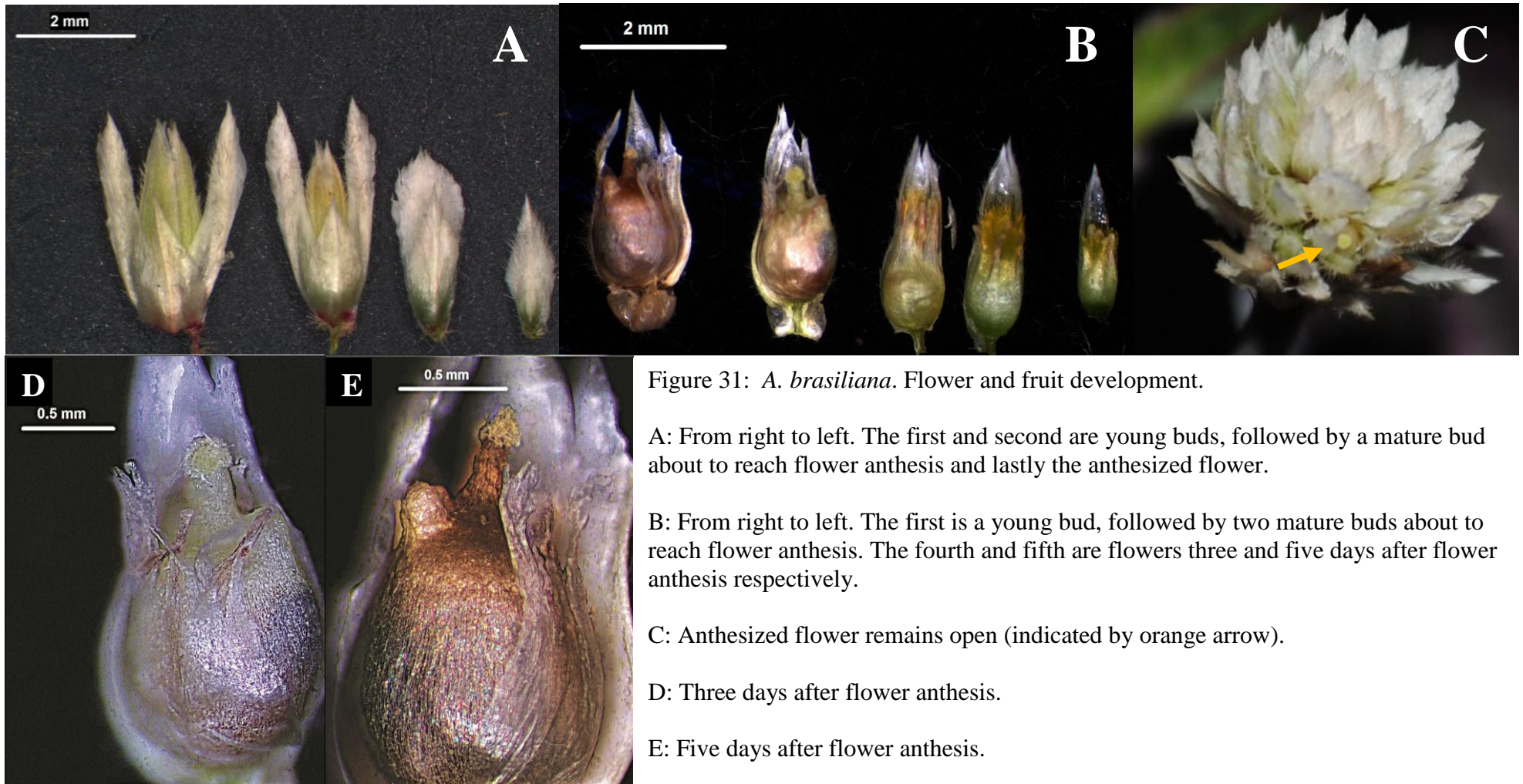


Figure 31: *A. brasiliiana*. Flower and fruit development.

A: From right to left. The first and second are young buds, followed by a mature bud about to reach flower anthesis and lastly the anthesis flower.

B: From right to left. The first is a young bud, followed by two mature buds about to reach flower anthesis. The fourth and fifth are flowers three and five days after flower anthesis respectively.

C: Anthesis flower remains open (indicated by orange arrow).

D: Three days after flower anthesis.

E: Five days after flower anthesis.

Scale bar: C. 1cm: 0.1cm

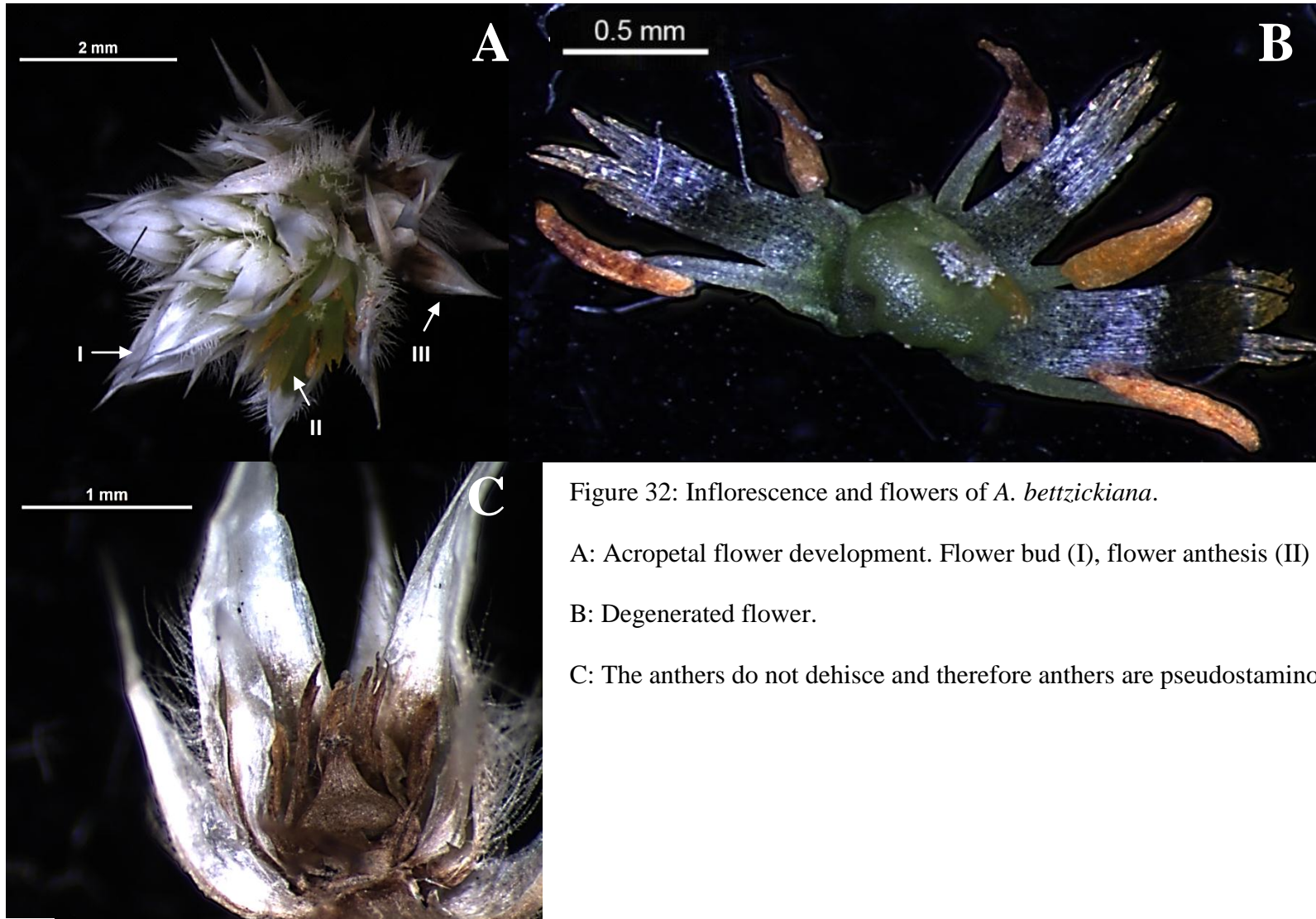


Figure 32: Inflorescence and flowers of *A. betzickiana*.

A: Acropetal flower development. Flower bud (I), flower anthesis (II) and degenerated flower (III).

B: Degenerated flower.

C: The anthers do not dehisce and therefore anthers are pseudostaminodes.