

***Bemisia argentifolii* Bellows & Perring**

(*Gossypium hirsutum*)

(Homoptera: Aleyrodidae)

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*Bemisia argentifolii* Bellows & Perring (Homoptera: Aleyrodidae)

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(*Gossypium hirsutum*)

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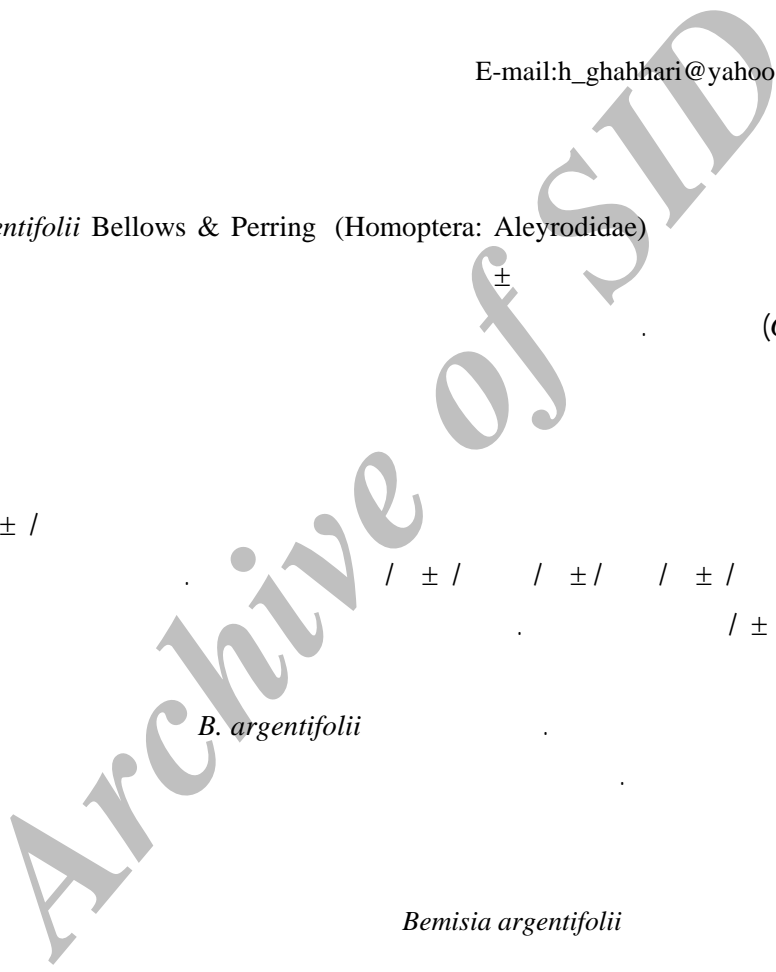
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*B. argentifolii*

*Bemisia argentifolii*

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## Morphological and Biological Studies on Different Life Stages of *Bemisia argentifolii* Bellows & Perring (Homoptera: Aleyrodidae) on *Gossypium hirsutum*

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### Abstract

Morphological and biological studies of *Bemisia argentifolii* Bellows & Perring (Homoptera: Aleyrodidae) were conducted on *Gossypium hirsutum* at  $24 \pm 2^{\circ}\text{C}$ ,  $75 \pm 5\%$  RH, and 14 h photoperiod. *B. argentifolii* has eight distinguishable life stages including egg, four nymphal instars, pre-pupa, pupa, and adult which were studied morphologically and suitable figures were drawn. The mean developmental period from egg to adult eclosion was determined  $24.86 \pm 6.78$  days, and separately was  $6.21 \pm 2.06$ ,  $3.85 \pm 1.67$ ,  $3.24 \pm 0.87$ ,  $2.91 \pm 0.52$ ,  $2.68 \pm 0.35$ ,  $2.03 \pm 0.17$ , and  $3.94 \pm 1.14$  days from egg to pupa, respectively. Male and female longevity was  $20.8 \pm 7.3$  and  $26.4 \pm 5.6$  days, respectively. The number of egg deposited was not uniform throughout the female life, and the maximum number was observed at 8<sup>th</sup> and 9<sup>th</sup> days of the life and then decreased to zero. Unmated females produced male offsprings; therefore, *B. argentifolii* is an arrhenotokous parthenogenetic. Nearly 24 hours is necessary for maturity of emerged adults.

**Keywords:** *Bemisia argentifolii*, Biology, Cotton, Morphology

*argentifolii* Bellow & Perring

*Bemisia*

(Homoptera: Aleyrodidae)

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(*Bemisia tabaci* Gennadius)

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<sup>2</sup>Integrated Crop Management (ICM)

<sup>1</sup>Integrated Pest Management (IPM)

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(*Gossypium hirsutum* var. *Oultan*)

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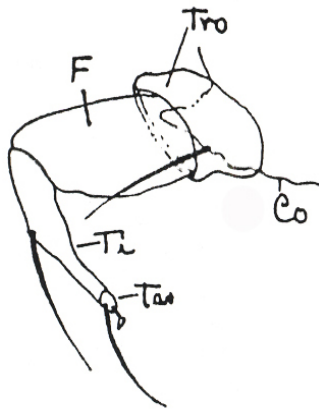
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<sup>2</sup>Crawler  
<sup>3</sup>Vasiform orifice

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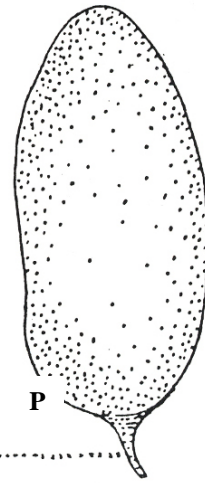
<sup>1</sup>Pedicel



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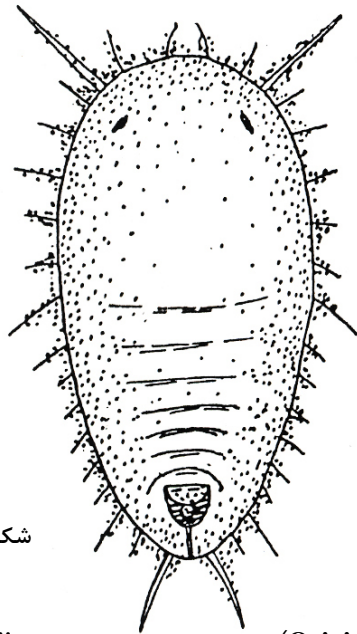
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*Bemisia argentifolii*

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(*Eretmocerus* spp. *Encarsia* spp.

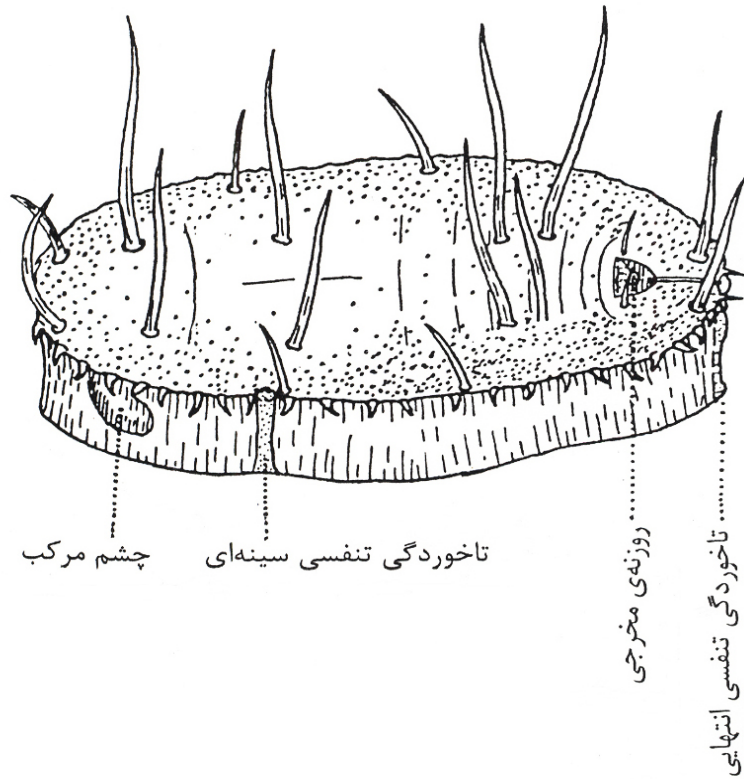
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<sup>3</sup>Operculum  
<sup>4</sup>Lingula

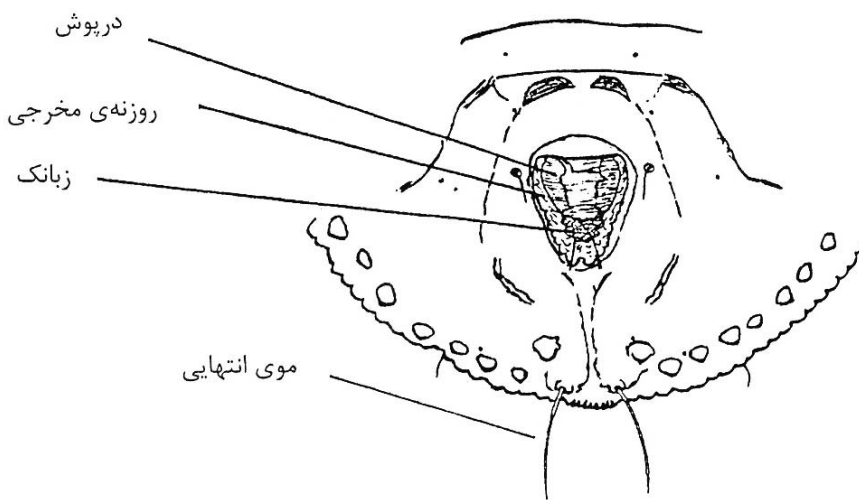
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<sup>1</sup>Mycetome  
<sup>2</sup>Endosymbiotic bacteria



*Bemisia argentifolii*

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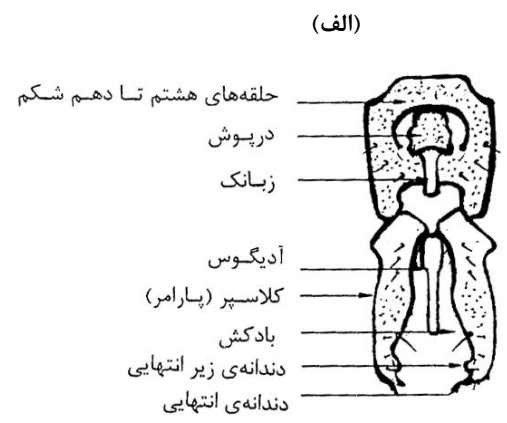
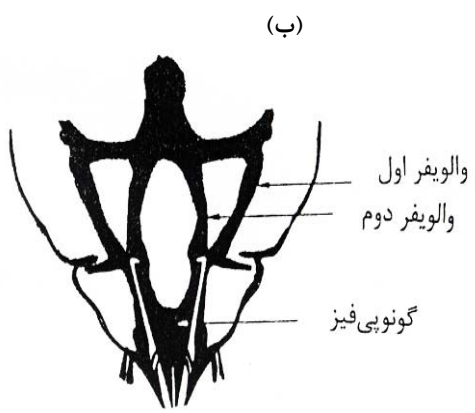
(Vasiform orifice)

*Bemisia argentifolii*

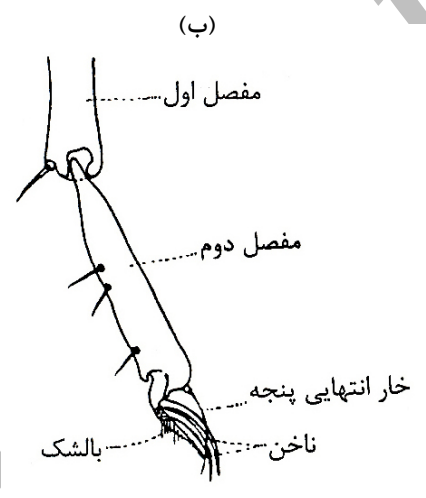
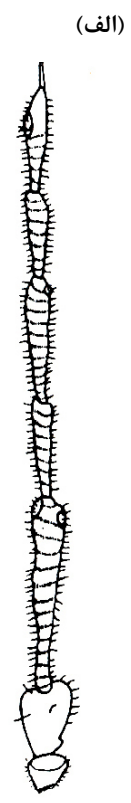
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*Bemisia argentifolii* ( ) ( )  
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*rialeurodes vaporariorum B. argentifolii*

<sup>5</sup>Radius

<sup>6</sup>Pulvillus = Parnoychium

<sup>7</sup>Geographical race

<sup>1</sup>Clasper = Paramere

<sup>2</sup>Aedeagus

<sup>3</sup>Stylet

<sup>4</sup>Facet

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*Eretmocerus mundus Mercet*

) *B. argentifolii*

*B. argentifolii*

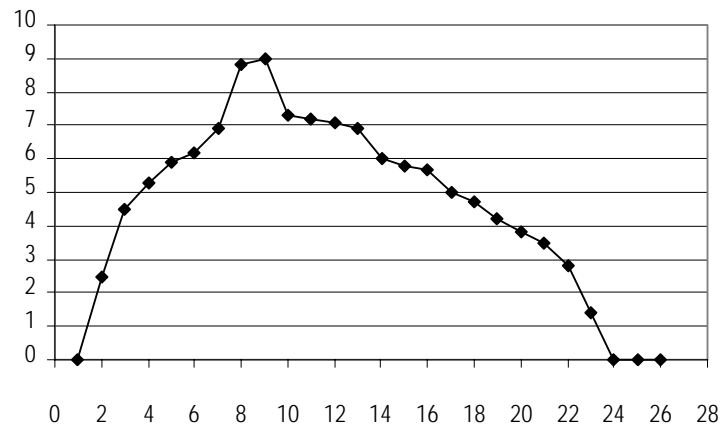
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<sup>1</sup>Arrhenotokous parthenogenetic  
<sup>2</sup>Male sterilization

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*Trialeurodes**vaporariorum* Westwood (Homoptera: Aleyrodidae)(*Bemisia tabaci*, Hom.: Aleyrodidae)

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