

Florida Preying Mantids

Insecta - Mantodea



Stagmomantis carolina (Johannson) female- photo by P. M. Choate

Florida Mantids - Key to Species
Diagnostic Key to species of Florida Mantids
Insecta - Mantodea

(this key was originally generated from an Insect Classification exercise, and has since been tested and modified by several groups of students)

Species of Mantids that may occur in Florida

Fam. Mantoididae

Mantoida maya Saussure & Zehntner - Little Yucatan mantid; adults Jun-Sept, open pinelands, scrub (resemble wasps)

= *Callimantis floridana* Scudder 1896 (smaller Florida mantid)

Fam. Mantidae

Brunneria borealis Scudder - Brunner's mantid

Litaneutria minor (Scudder) - Minor ground mantid (possible)

Gonatista grisea (Fab.) - Grizzled mantid (lichen mimic)

Thesprotia graminis (Scudder) - Grass-like mantid

Oligonicella scudderi (Saussure) - Scudder's mantid

Mantis religiosa L. - European mantid (introduced)

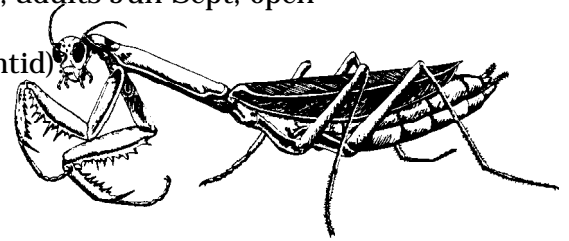
Tenodera angustipennis Saussure - Narrow-winged mantid

Tenodera aridifolia Saussure - Chinese mantid (introduced), largest mantid in US.

Stagmomantis floridensis Davis - Larger Florida mantid - Dunedin (Oct), restricted to Florida

Stagmomantis carolina (Johannson) - Carolina mantid

Phyllovates chlorophaea (Blanchard) - (record from Blatchley, 1920)



**Dichotomous Key to Species of Mantids
that may occur in Florida**

1. Pronotum distinctly longer than wide; size normally much larger than 30mm 2
 - Pronotum almost square, about as long as wide; small species, 30mm. *Mantoida maya* S. and Z.
2. Posterior tibia carinate on upper surface; head with dorsal projection between eyes *Phyllovates chlorophaea* (Blanchard)
 - Posterior tibia with dorsal surface rounded, smooth; head without projection 3
3. Antennae thin, threadlike; body shape varied (Fig. 1) 4
 - Antennae thick, especially at base; (Fig. 2) body elongate, narrow body (Fig. 3) *Brunneria borealis* Scudder
4. Larger, 36mm or more in length; OR front tibia with one or more dorsal teeth; pronotum usually much longer than front coxa 5
 - Small, 32mm or less in length; front tibia with no dorsal tooth; pronotum equal in length or slightly longer than front coxa. *Litaneutria minor* (Scudder)
5. Pronotum distinctly narrowed ahead of point at which front legs are attached; form narrower 6
 - Pronotum not narrowed ahead of point at which front legs are attached (Figs. 4, 5) *Gonatista grisea* (Fab.)
6. Front tibia with few teeth, with at least one dorsal tooth, and measuring less than 1/2 as long as front femur 7

- Front tibia with several teeth, no dorsal tooth, and measuring more than ½ as long as front femur 8
- 7. Hind portion of pronotum less than 3 times as long as front portion *Oligonicella scudleri* (Saussure)
- Hind portion of pronotum three or four times as long as front portion *Thesprotia graminis* (Scudder)
- 8. Facial shield (plate below antennal insertion) more than twice as wide as high (Fig. 6) 11
- Facial shield (plate below antennal insertion) less than twice as wide as high 9
- 9. Front coxa with a large black-ringed spot near base, beneath; green color of tegmen not sharply confined to costal area *Mantis religiosa* L.
- Front coxa with no large spot; green color of termina usually sharply confined to costal area 10
- 10. Smaller (70-75mm); hind wing narrower from front to rear, lightly marbled *Tenodera angustipennis* Saussure
- Larger (77-103mm); hind wing broader from front to rear, heavily marbled; Chinese Mantid *Tenodera aridifolia sinensis* Saussure
- 11. Larger (58mm or more); form more elongate, abdomen of female nearly parallel-sided, **tegmina narrower, reaching only middle of abdomen**; stigmatic patch pale, inconspicuous, or obsolete *Stagmomantis floridensis* Davis
- Smaller (57mm or less); form less elongate, abdomen of female strongly widened at middle, **tegmina broad, reaching apical third of abdomen; stigmatic patch black**, conspicuous (cover photo) *Stagmomantis carolina* (Johannson)



Fig. 1. Male *Stagmomantis carolina*, thin antenna

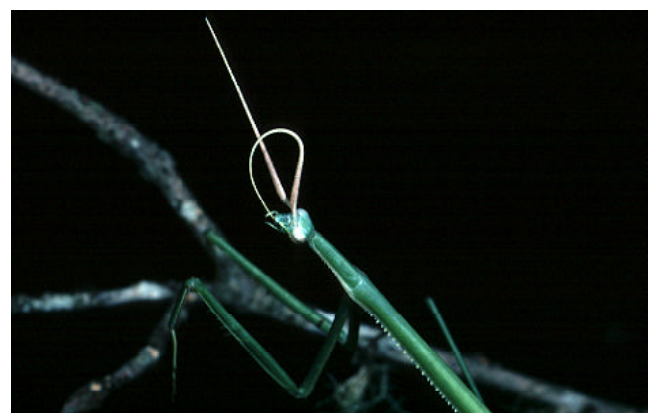


Fig. 2. *Brunneria*, thick antenna

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Fig. 3. *Brunneria borealis*



Fig. 4. *Gonatista pronotum*

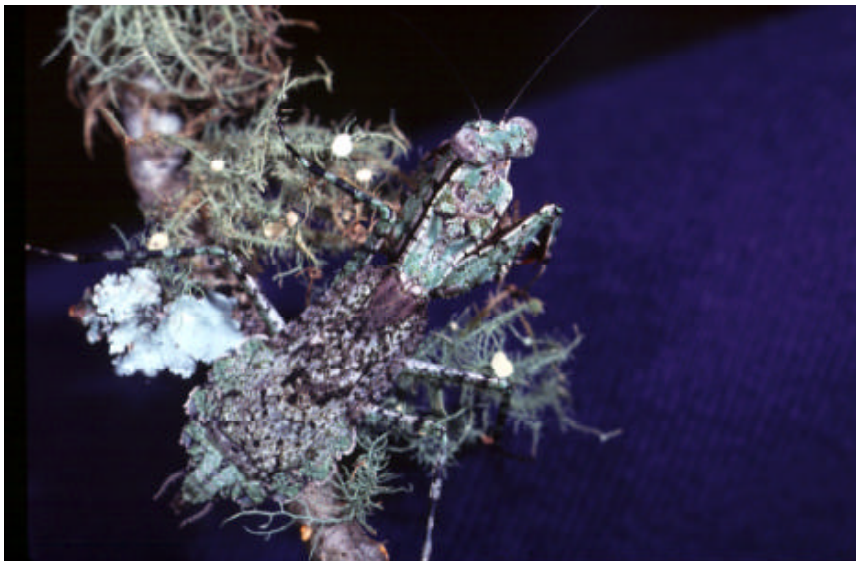


Fig. 5. *Gonatista grisea* female

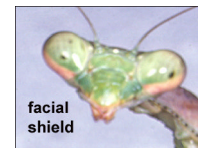


Fig. 6. Face of *Stagmomantis*

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