

Cotinis nitida (Linnaeus, 1764)

Taxonomy

Sub family: Cetoniinae / Tribe: Gymnetini / Genus: *Cotinis*

Distinguishing Features

Large dorsoventrally flattened beetles, body length: 15-27mm, 8.5-15.5mm wide. Dorsal body (apart from shiny head) matte/velvet, colouration variable, usually green with tawny yellow areas. Body metallic green ventrally, occasionally copper. Hind femora pale, distinct from tibia and other ventral surfaces. Pronotum and elytra appearing completely smooth and lacking punctations. Pronotum projecting basomedially over the scutellum, nearly completely concealing it from view. Clypeus with apex emarginate/subquadrate, and bearing a frontal denticle (clypeal horn). Frons developed into a forward projecting longitudinal process. Mesepimeron visible from above. Posthumeral emargination of the elytra distinct. Forwardly projecting mesometasternal process present. Pygidium bicoloured, apical portion testaceous, basal portion green.

Related and Similar Species

The genus *Cotinis* contains 29 species across 3 subgenera. The typical subgenus *Cotinis* contains most of the species.

Cotinis is the only member of Gemnetini tribe that contains a frontal clypeal horn. All species of *Cotinis* also lack dorsal scales, that can be present in other tribal members.

Considerable variation in morphological features have been recognised in *Cotinis mutabilis* and *Cotinis nitida* making identification done solely on dorsal colouration and pattern impossible. The two species can be separated from each other by differences in body length (*C. nitida*: 15-27mm, *C. mutabilis*: 17-34mm), pygidium colouration (*C. nitida*: bicoloured with an apical testaceous area, *C. mutabilis*: unicolorous), and metafemur colouration (*C. nitida*: pale, *C. mutabilis*: same colour as tibia). The clypeal horn of *C. nitida* is usually not as large as what is seen in *C. mutabilis*. Strut-like ridge between clypeus clypeal horn seen in *C. mutabilis* are commonly absent or greatly reduced in *C. nitida*.

Biological Data

Commonly known as the Green June Beetle, adult *Cotinis nitida* beetles are known to feed on a wide range of thin skinned fruits including grapes, corn, apples, pears, peaches and berries. They are a recognised serious pest for the damage they cause both in larval and adult forms. They commonly have one generation per year, and can overwinter as mature larvae. They are slow flying, creating an audible buzz similar to a bumble bee.

Larvae are pests of pastures, hayfields, lawns and golf courses. The damage caused is through feeding on organic matter around the grass roots, disrupting the root/soil interface and limiting the plants ability to absorb water.

The presence of *Popillia japonica* has also been recorded as facilitating and increasing the pest status of *Cotinis nitida*. By feeding on intact grape fruits *P. japonica* in the United States have allowed fruit to be exploited by *Cotinis nitida*, whose mouthparts would have otherwise been unsuited to feed on the under ripe fruit (Hammons et.al. 2009). Injured fruit can also produce attractant volatiles causing potential for further fruit damage by increasing the number of beetles present.

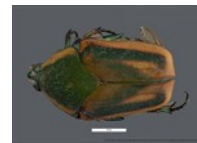
Distribution

Cotinis nitida is native and common through much of the Eastern United States, and west into Texas, Oklahoma and Kansas. It is absent from Australia.

Useful Links

Texas A&M Fact Sheet: http://agrillife.org/winegrapes/files/2015/11/GJB_factsheet.pdf

References



[Cotinis nitida dorsal view](#)

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[Cotinis nitida lateral view](#)

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[Cotinis nitida ventral view](#)

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[Cotinis nitida posterior view](#)

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[Cotinis nitida head front view](#)

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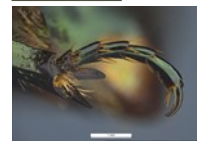
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[Cotinis nitida head side view](#)

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[Cotinis nitida tarsal claws](#)

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[Cotinis nitida feeding on grapes. Used with permission, from Hammonds et.al. \(2009\).](#)

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