DEPARTMENT OF ENTOMOLOGY

Cornell University

COMSTOCK HALL
ITHACA, NEW YORK 14853

26 August 1986

Dear Steve,

Your letter and the package arrived toward the end of last week. The moths came through in excellent shape. I regret to say that the particular plate that you copied from Seitz is one of the more mixed-up plates in the work. The moth that you figure in the paper is the species that I call procus of which scabellum is a synonym. Both names are based on females; however, the Cramer figure although it shows the triangular spot present in the females does not have it silver-colored, but essentially the same color as the ground color. There is no other American species like it.

The moths you sent for identification are:
1) Hemicephalis viridis Druce.
2) Othreis serpentifera Walker
3) Othreis procus Cramer ♂
4) Othreis materna subsp. apta Walker ♂
5) Othreis materna subsp. apta Walker ♀

Some workers regard materna (Africa) and apta (South America and Central America including tropical Mexico) as distinct species. I have never had material of both populations for comparison so I am following the thoughts of the more reasonable school. It is a good possibility that apta does not even warrant subspecific status.

Now the Seitz plate:
top two figures - O. serpentifera
second line figures - O. materna apta, left female, right male
third line figures - O. procus, left male, right female
fourth line figures - O. regina (gubernatrix syn.), female left, male right.
fifth line figures - left looks like regina and right like serpentifera.
From all this you will see how much of a mix-up the plate really is. One must remember that for the most part the sexes are often dimorphic in Othreis; this has made for confusion and a profusion of names.

In the old world tropics species of Othreis have been implicated in damage to fruit, especially the common and widespread fullonia. There is a fair amount of literature on this species and its habit of piercing fruit. If you cannot track this information down in the review literature and the Zoological Record, I could probably dig some of it up in my files. Pierre Viette wrote a paper on it in 1947 or 1948 if I recall correctly.

I will be pleased to have the specimens that you sent if you can spare them. I am returning the Kodachrome slide of the Seitz plate. I have a set of Seitz.

With good wishes,

sincerely,

John G. Franclemont
Professor Emeritus

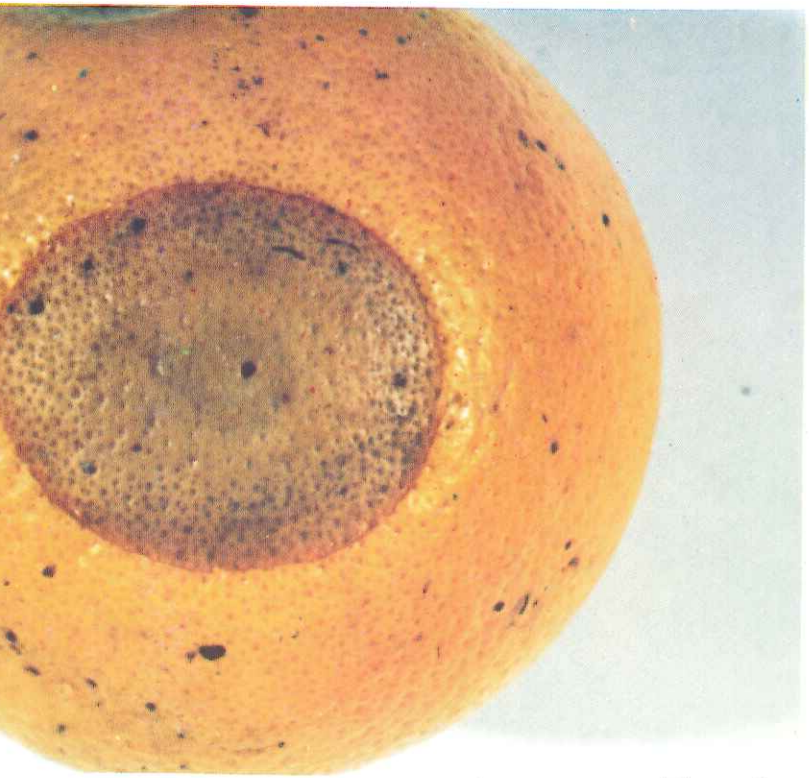


Figura 3.

tipo de daño descrito en ésta hoja técnica favor reportarlo a:

reña de Investigación Agrícola
s, C.A.

8 y 56-2470

boración de CDC, San Pedro Sula, Honduras, C.A.

Artes Gráficas
Departamento de Impresión
Secretaría de Recursos Naturales

FUNDACION HONDUREÑA DE INVESTIGACION AGRICOLA
(F H I A)

INSECTOS DE CITRICOS
POLILLA PERFORADORA DE LA FRUTA

Othreis scabellum (Guenee)

La Lima, Cortés, Honduras, C.A. 1985

INTRODUCCION

Reportes de daño en naranjas variedad Valencia en el área de Guaymitas, departamento de Yoro, fueron investigados durante agosto-noviembre de 1984. Observaciones hechas durante las horas 8:00 p.m. - 10:00 p.m., revelaron la presencia de adultos de polillas penetrando la cáscara por medio de sus partes bucales y alimentándose del jugo de la fruta. Los adultos de éstas polillas fueron identificados como *Othreis scabellum (Guenée)* (Lepidóptera: Noctuidae) por J.B. Heppner, Division of Plant Industry, Gainesville, Florida, USA.

Los adultos de *O. scabellum* tienen una extensión de las alas que varía de 7-8 cm. Las alas anteriores son de color café, y las traseras son de un color brillante con bandas negras (Figura 1). El probóscide (parte bucal) de éstas polillas tiene unas estructuras salientes en la parte distal que sirven para hacer agujeros a través de la cáscara.

DAÑO:

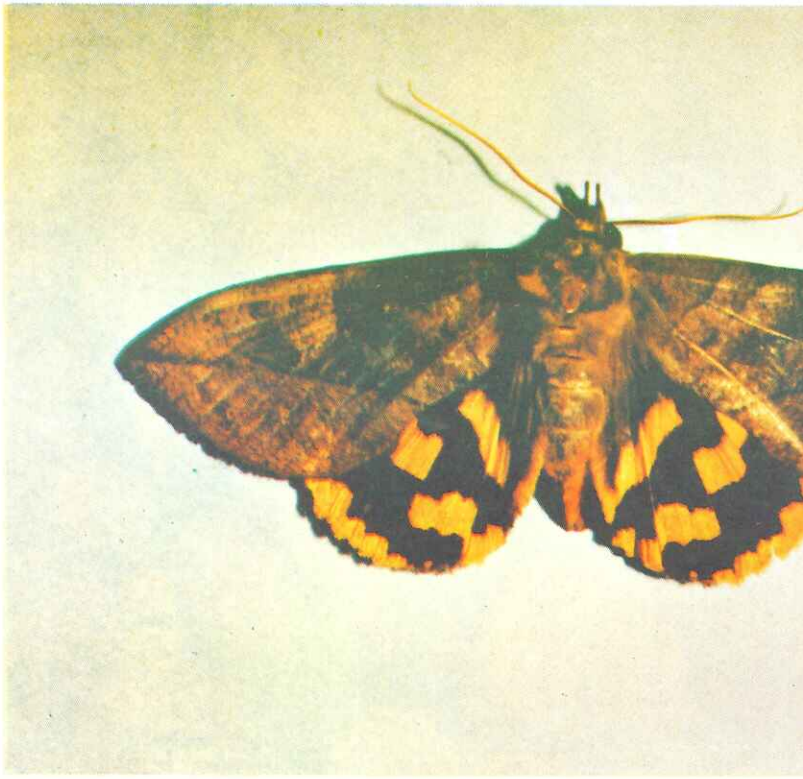
El daño en la fruta se manifiesta inicialmente por la presencia de agujeros en la cáscara. En pocos días se forma un área de color café alrededor del agujero (Figura 2), el cual con el tiempo se agranda y se pudre totalmente (Figura 3).

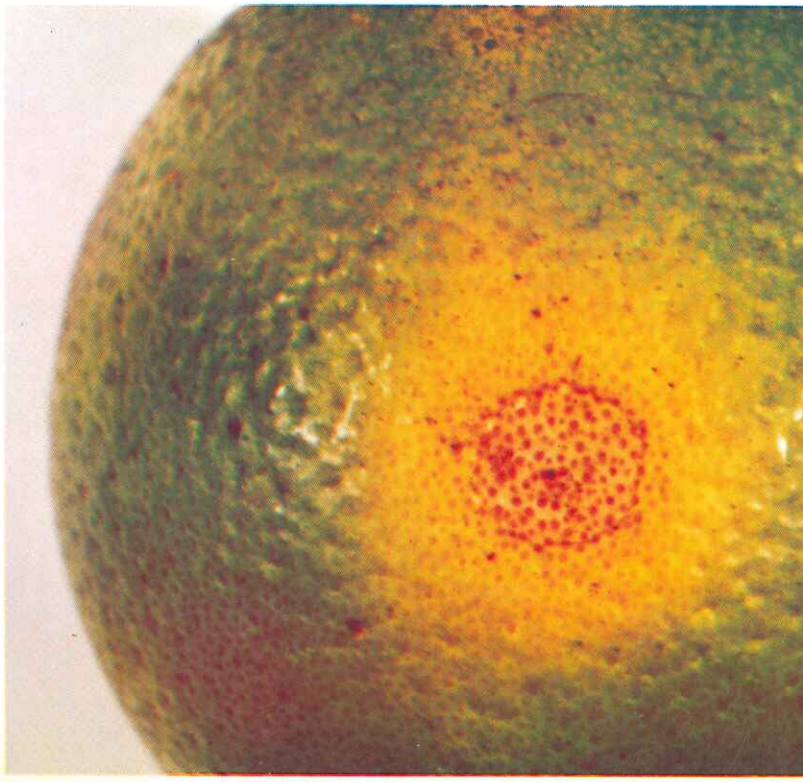
Durante este proceso la fruta exuda jugo el que atrae varias especies de insectos, especialmente mariposas y moscas. La pudrición de la cáscara y consecuentemente de la fruta se debe a la infección por medio de microorganismos que pueden ser transmitidos por el viento o insectos que visitan la fruta. Las polillas por lo general prefieren fruta que está cambiando de color.

CONTROL:

Debido a la falta de información biológica sobre *O. scabellum* especialmente sobre el estado larval y las plantas hospederas que sirven de fuentes de alimentación al insecto, no se pueden dar medidas de control bien definidas. Se sugiere lo siguiente:

1. Eliminar las malezas dentro del huerto, ya que éstas permiten que los adultos *O. scabellum* pasen las horas de luz en éstas áreas.
2. Hacer observaciones nocturnas del huerto para detectar la presencia del adulto.
3. Hacer aspersiones dirigidas a malezas hospederas si se descubren adultos.





Mini Risk Assessment
Fruit Piercing Moth: *Eudocima fullonia* Green
[Lepidoptera: Noctuidae]

Erica E. Davis[1], Sarah French[1], & Robert C. Venette[2]
1-Department of Entomology, University of Minnesota, St. Paul, MN
2-North Central Research Station, USDA Forest Service, St. Paul, MN

September 30, 2005

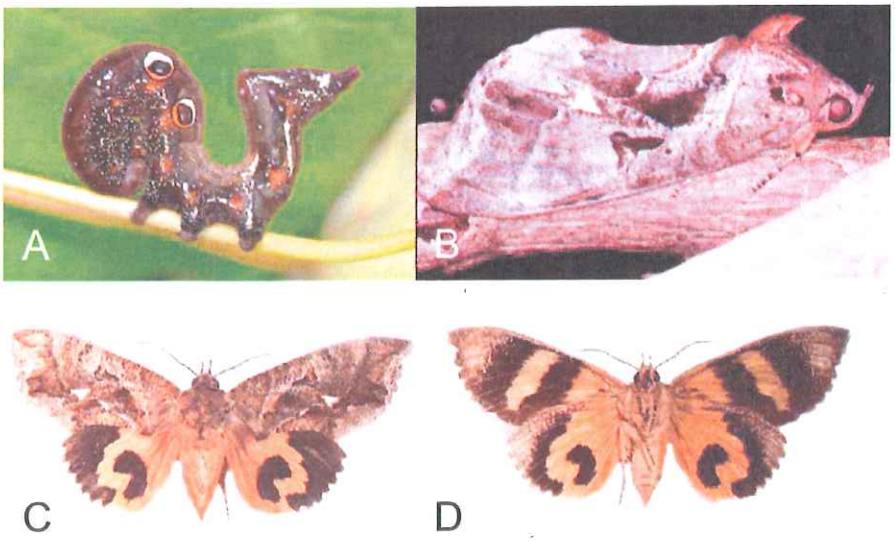


Figure 1. *E. fullonia*: (A) larva; (B) adult female at rest; (C) adult female dorsal view; and (D) adult female ventral views.
[Images courtesy of (A) J. Otto, http://linus.socs.uts.edu.au/~don/larvae/cato/fullon.html); (B) Apte (1999); (C-D) CSIRO (2004).]

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A New US Record for the tropical fruit-piercing moth *Eudocima serpentifera* (Walker, [1858])

by
Vernon Antoine Brou Jr., 74320 Jack Loyd Road, Abita Springs, Louisiana 70420 USA

A single specimen of the large noctuidae moth ***Eudocima serpentifera*** (Walker) (Fig. 1) was captured in an ultra-violet light trap at sec.24T6SR12E, 4.2 mi NE of Abita Springs, Louisiana on October 25, 2006.

Fig. 1. ***Eudocima serpentifera*** (Walker) a: dorsal view, b. ventral view.

This female appears to be the first reported record for this tropical species in the United States. The type locality of ***serpentifera*** is the Dominican Republic and Brazil. ***E. serpentifera*** is significantly larger (wing length: 52 mm) than the other known occasional tropical migrant ***Eudocima apta*** (Walker, [1858]) (wing length: 45 mm) (Fig.2).

I previously reported on ***apta*** (Fig. 2) under the name ***materna*** (Brou, 1994), recording two males and one female specimens taken at ultra-violet light traps at the same Abita Springs, Louisiana study site. Subsequently, I have taken a fourth specimen, a male of ***apta*** on March 31, 2000 captured at Red Dirt National Wildlife Refuge, Kisatchie National Forest, Natchitoches Parish, Louisiana.

Numerous species of adult ***Eudocima*** are listed as pests of various fruit species worldwide. Davis, et.al. (2005) reported adult ***Eudocima fullonia*** Clerck, to feed on economically important fruits as citrus, apple, pear, stone fruits, grape, melon, mango, tomato, papaya, pineapple, and strawberry. ***E. fullonia*** is a pest species recorded from, Africa, Asia, Oceania, and the Indo-Australian region, including Hawaii and Australia. Davis, et.al. (2005) reported larvae of***fullonia*** to feed on foliage of plants in the families Menispermaceae and Fabaceae. Zilli and Hogenes (2002) stated ***Eudocima phalonia*** (Linnaeus, 1763) comb. n. must be used for the species currently known as ***Eudocima fullonia*** (Clerck, [1764]) relegated to synonymy.

There appears to be eight species of ***Eudocima*** Billberg in the new world: ***Eudocima anguina*** (Schaus), TL [type locality]: Costa Rica; ***Eudocima apta*** (Walker), TL: Brazil; ***Eudocima collusoria*** (Cramer), TL: Surinam; ***Eudocima colubra*** (Schaus), TL: Costa Rica; ***Eudocima memorans*** (Walker), TL: West Coast of Americas (probably Ecuador); ***Eudocima procus*** (Cramer), TL: Surinam; ***Eudocima serpentifera*** (Walker) TL: Dominican Republic and Brazil, ***Eudocima toddi*** (Zayas) TL: Cuba. This is quite contrasting to the seven ***Eudocima*** species reported to occur in northeastern Queensland alone. Davis, et.al. (2005) make note of one specimen of ***Eudocima procus*** (Cramer) intercepted in Miami on chrysanthemum originating from Colombia. I question the validity of this determination as I will note later in this article. To the New World ***Eudocima*** species we can add the Palearctic species, ***Eudocima tyrannus*** (Guenee), a specimen

PLANT PEST INFORMATION UPDATES (PPIU)
April 1985

U.S. Department of Agriculture (USDA)
Animal and Plant Health Inspection Service (APHIS)
Plant Protection and Quarantine (PPQ)

NEW PEST ADVISORY GROUP (NPAG)
PLANT PEST ACTIVITY FROM JANUARY THROUGH MARCH 1985

NEW PLANT PESTS

NOXIOUS WEED NEW TO THE UNITED STATES

A Federal noxious weed was discovered in Florida. Specimens of Mimosa pigra var. pigra Linnaeus (Fabaceae) were collected on July 2, 1984, in Little Lake Bonnett and Lake Letta, Highlands County. Detection and identification of the weed was made by D. White (Botanist, Center for Aquatic Weeds, University of Florida, Gainesville). This weed may have been present for more than 10 years. APHIS will cooperate with Florida to survey for this weed. Survey results will determine further action.

This noxious weed occurs in tropical Africa, Madagascar, Thailand, Indonesia, Australia, South America, Costa Rica, and Mexico. This weed rapidly reproduces to form dense, thorny thickets on sandy lake shores.

NEW FRUIT FEEDER IN HAWAII

Larvae of a fruit-piercing moth Eudocima fullonia (Clerck), Lepidoptera: Noctuidae, were collected at Moanalua Gardens, Oahu Island, Hawaii. Several specimens were collected on Erythrina variegata var. orientalis, a coraltree, on January 26, 1985, by E. Shiroma (PPQ). Adults were reared. Dr. J. W. Beardsley (University of Hawaii, Entomology Department) and Father J. C. E. Riotte (Bishop Museum) identified the species, and Dr. R. W. Poole (Insect Identification and Beneficial Insect Introduction Institute, Systematic Entomology Laboratory, Agricultural Research Service (IIBIII, SEL, ARS)) confirmed it as E. fullonia on March 15, 1985.

R. A. Heu (Survey Entomologist, Hawaii State Department of Agriculture) reported that preliminary surveys on Oahu revealed two infested nearby locations and a possible third site. These sites are the only known infestations on Oahu. Over 36 other Erythrina sites were inspected with negative results.

E. fullonia is widespread in the Old World tropics in southern Africa, through eastern Asia, Australia, and the Pacific Islands. Adults of this nocturnal moth pierce various fruits to suck on the juices. Mainly a pest of citrus, adults feed on other fruits, such as mango, papaya, banana, apple,