

The Most Economic Lepidopterous Pests Attacking Vegetable Crops in Egypt.

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ABSTRACT

In this work there about 25 lepidopterous pest species belonging to seven families that recorded in Egypt and throughout the world as moderate or serious pests on vegetables and other crops of economic importance. The correct insect scientific names and the common names of the studied speen have been corrected and newly confirmed and updated. Host plant and distribution have been achieved.

INTRODUCTION

The updating of the scientific insect names and their common or vernacular names is very important in any entomological work. It the first step to present the accurate and the updated scientific names for all entomological works i.e., survey of insect, breeding of insect and ecology, pest management and control program, agricultural extension and training programs etc. The host plants and the geographical distribution have been recently renewing and updated in that time the economic importance or pest status have been completely discussed. Some recent references have bee added. Povolny, 1994; Capinera, 2001 & 2007; Robinson and Sattler, 2001; Sihvonen, 2005; Badr, 2007; Baraniak, 2007; Stringer, 2008; Powell & Opler, 2009; Erler *et al.*, 2010; el-Rawy *et al.*, 2011; Franklin, 2011; Marillo *et al.*, 2013; Liu Hong & Li Houtlun, 2014). The present study aimed to give revision of the most economic lepidopterous insect pests belonging to seven families i.e., Gelechiidae, Geometridae, Noctuidae, Nolidae, Plutellidae, Pyralidae, and Pyraustidae attacking the vegetable and ornamental plants in Egypt.

MATERIALS AND METHODS

All of the updating insect scientific names used here have been obtained from the taxonomic articles and from the revisional classification works from the world net i.e. Wikipedia etc. around the world

The host plants, geographical distribution and economic importance have been revised and achieved after revising the recent entomological research around the world up till now. The recent literatures have been added at the end of this work.

RESULTS AND DISCUSSION

Order: Lepidoptera

Family: Gelechiidae

1- *Phthorimaea operculella* (Zeller, 1873)

Potato tuberworm دودة درنات البطاطس

Host plants: Main host potato-tomato secondary hosts i.e. eggplant, pepper, henbane, tobacco, thon-apple (datura).

Geographical distribution: Cosmopolitan species of world wide distribution.

Pest status: The potato tuber worm an important pest on potato tubers in storage and on tomato fruits in the field.

Family: Gelechiidae

2- *Scrobipalpa ocellatella* (Boyd, 1858) (*Phthorimaea*)

Table beet tuberworm دودة درنات البنجر

Table beet twigworm دورة براعم بنجر المائدة

Sweet beet moth or worm فراشة أو دودة بنجر السكر

Spinach twing borerworm دودة براعم السبانخ

Chard beet leaf budworm دودة البراعم الورقية للسلق

Host plants: Chenopodiaceae plants i.e., table and sugar beet, chard beet, spinach beet, worm seed plant, orach, (*Atriplex*), Amaranth (*Amaranthus*).

Geographical distribution: Cosmopolitan species of worldwide distribution, including the Mediterranean region, Canary Islands, most of Europe countries, Middle East, Iran, Southern Europe, Russia, Ukraine, Moldova, Georgia & Turkmenistan, all Asia, Africa, Egypt, Palestine, Jordan, Iraq, Iran, Saudi Arabia.

Pest status: The species acts as insect pest of all beet root leaves, buds, tubers of table and sugar beet, chard and spinach in all region of Egypt.

Family: Gelechiidae

3- *Tuta absoluta* (Meyrick, 1917)

American tomato leafminer صناعة أنفاق أوراق الطماطم الأمريكية

South American tomato worm دودة طماطم أمريكا الجنوبية

Tomato leafminer صناعة أنفاق أوراق الطماطم

Host plants: Tomatoes fruits & leaves, potato leaves, peppers and eggplant leaves, black night shade leaves, *tobacco*, *datura*, *Physalis* spp. kidney bean, cow pea. Slender amaranth, beet root, bell pepper, mallow bindweed, wild mustard, melon pear, common sow thistle, jonson grass, spinach & common cocklebur, etc.

Geographical distribution: Peru, South America (Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Uruguay & Venezuela), Europe, Mediterranean regions Turkey, Middle East, Bangladesh, Georgia, India, Iran, Iraq, Jordan, Kuwait, Lebanon, Nepal, Saudi Arabia, Turkey Syria, Emirates, Yemen, Algeria, Egypt, all Europe countries Ghana, Lesotho, Libya, Mayotte, Morocco, Mozambique, Kenya, Botswana, South Africa, Nigeria, Senegal, Tanzania, Tunisia, Uganda, Zambia, Cust Rica, Panama.

Pest status: The American tomato leafminer species acts as a very harmful tomato pest on leaves and fruits in all parts of Egypt.

Family: Geometridae

4- *Scopula coenosaria luridata* (Zeller, 1847) (= *Idaea* & *Acidalia*)

Asparagus leaf looper worm دودة أوراق الأسبرجس القياسية

Tomato flower worm دودة أزهار الطماطم

Host plants: Asparagus, tomatoes, egg plant flowers, black night shade, hen-bane, peppers & datura, etc.

Geographical distribution: Cosmopolitan species. USA, Canada, Europe, Mediterranean Region, Middle East, Asia, Minor, Japan, China, Pakistan, India, North Africa, Somalia, Yemen, Oman, Australia & Egypt, etc.

Pest status: The tomato flower worm is a harmful pest to tomatoes causes falling of flowers and newly setting tomato fruits, in all region of Egypt.

Family: Noctuidae – Pluusiinae

5- *Autographa gamma* (L., 1758)

Silver-y shaped semilooper moth	الفراشة النصف قياسية ذات الحرف y
Gamma moth or fly	الفراشة النصف قياسية ذات الحرف y
Common cabbage semilooper worm	دودة الكرنب النصف قياسية الشائعة
Tomato fruit semilooper worm	دودة ثمار الطماطم النصف قياسية

Host plants: Cabbage, cauliflower, broccoli, mustard, turnip, rocket, radish, kale, rape, violet cabbage, Brussels sprouts, collard, beans, beet and sugar beet, carrot, clover, corn, sorghum, cotton, Egyptian lupin, ground nut, lettuce, celery, parsley, onion, peas, peppermint, potatoes, tomato, safflower, sunflower, camomile, okra, artichoke, oleander, sweet potato, chard beet, spinach, chrysanthemum, pyrethrum, cucurbits, kidney bean, broad bean, chickpea, fenugreek, lentil, soyabean, garlic, malva, privet hedge, sorrel, rose-moss, common purslane, tobacco, dill, bishops wood.

Geographical distribution: Cosmopolitan in all region of the world.

Pest status: Tomato fruit semilooper worm is very destructive pest on vegetables, ornamental medicinal plants and cotton, etc. in Egypt.

Family: Noctuidae

6- *Chrysodeixis chalcites* (Esper, 1789) (= *Plusia*, *Phytometra* and *Autographa*)

Golden twin spot moth	الفراشة ذات النقطتين الذهبيتين
Two dot semilooper moth	الفراشة النصف قياسية ذات النقطتين
Tomato fruits semilooper worm	دودة ثمار الطماطم النصف قياسية
Legumes pods semilooper worm	دودة قرون البقوليات النصف قياسية

Host plants: Cabbage, cauliflower, solanaceous plants, tomatoes, sweet potato, lettuce, corn, millet, legumes, onion, garlic, peppermint, pennyroyal, okra, cotton, hemp, malva, sesame, sorrel, spinach, strawberry, astraceous plants oleander, beet root, sugar beet, atropa, sesbane, lentil, flax, labiab, tobacco, sweet potato, ground nut, cucurbits, corn, dill, spinch, celery, parsley, etc.

Geographical distribution: Cosmopolitan species, southern Europe, all Mediterranean region, Middle East Southern Africa, Asia, North America, Europe (Albanic Austria, Belgium, Bulgaria, Cyprus, Denmark, France, Germany, Greece, Hungary, Italy, Malta, Poland, Portugal, Romania, Spain, Sweden, England.

Pest status: The species is widely spread in all region in Egypt infesting tomato fruits, cabbage, cauliflower, cucurbits fruits, legumes pods, corn, cotton bolls, okra fruits, sweet potato, carawy, ground nut, Egyptian garlic, dill, beet root, sugar beet, spinach, celery, parsley.

Family: Noctuidae

7- *Cornutiplusia circumflexa* (L. 1767) (*Syngrapha*, *Plusia*, *Autographa*)

Silver-y shaped semilooper moth	الفراشة النصف قياسية ذات الخط المتعرج
Common crucifers semilooper worm	دودة النباتات الصليبية النصف قياسية
Legumes sinuated line moth	فراشة البقوليات ذات الخط المتعرج
Tomato semilooper worm	دودة الطماطم النصف قياسية

Host plants: Cabbage, cauliflower, turnip, kale, rape, broccoli, beet & sugar beet, clover, alfalfa, soyabean, cotton, okra, malva, lettuce, artichoke, tomato, potato, onion, garlic, sweet potato, tobacco, flax, all asteraceous plants, radish, rocket etc.

Geographical distribution: Cosmopolitan pest i.e., Italy, Greece, Russia, Ural, Africa, Canary Island, South-west Asia, Ceylon, India, Nepal, China, Japan.

Pest status: The species act as a moderate pest on the above-mentioned host plants especially tomatoes, cabbage,

cauliflower, cucurbits, legumes, sunflower, safflower, lettuce, celery, parsley, spinach onion, garlic, flax, cotton bolls etc. in region of Egypt.

Family: Noctuidae

8- *Thysanoplusia orichalcea* (F.,1775)(*Trichoplusia*, *Thysanoplusia*)

Golden wings semilooper	الفراشة النصف قياسية الذهبية
Slender burnished brass moth	الفراشة الخنثوية المصقولة (المحروقة)
Soyabean looperworm	دودة فول الصويا النصف قياسية

Host plants: Cucurbits, crucifers, lettuce, artichoke, cotton okra, tomatoes, sweet potato, spinach, onion, garlic, radish, sorrel, celery, parsley, beet, sugar beet, sesame Egyptian lupin, all legumes, cotton, flax, tobacco, alfalfa, ground nut, all asteraceous plant including sunflower, safflower, chrysanthemum, lucerne, soyabean, carrot, potatoes, etc.

Geographical distribution: Cosmopolitan, America, Canada, Australia, New Zealand, Europe, Mediterranean region, all Africa, South Asia, India, Indonesia, Sri Lanka, Middle East, Egypt.

Pest status: This semilooper spread in all parts of Egypt infesting all the previous host plants especially tomatoes, cabbage, cauliflower, turnip, soyabean, currot, lucerne, potatoes, lettuce, spinach, artichoke, onion, garlic, legumes etc.

Family: Noctuidae

9- *Thysanoplusia circumscripta* (Freyer; 1831) (*Trichoplusia*, & *Plusia*)

Two small white-spots semilooper	الفراشة النصف قياسية ذات النقطتين البيضاء الصغيرتين
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Host plants: Crucifers, cucurbits, legumes, solanaceous plants, cotton, okra, lettuce, spinach, artichoke, onion, garlic, lentil, sesames flax, soyabean, alfalfa, clover, fenugreek, pea, Egyptian lupin, ground nut, broad bean, pigeon pea, sesban, corrot, peppermint, table beet, sugar beet, lentil, malva, hemp, celery, parsley, sunflower, safflower, chrysanthemum, carration etc.

Geographical distribution: Cosmopolitan including Mediterranean Basin, Near East, Middle East, All Africa & Egypt.

Pest status: The species of moderate importance attacking crucifers, legumes, solanaceous crops onion, garlic lentil, sesame soyabean, lucerne, ground nut etc., in all part of Egypt.

Family: Noctuidae

10- *Thusunoplusia daubei* (Boisd., 1840) (*Plusia*, *Triohoplusia*)

Lesser cabbage semilooper	دودة الكرنب النصف قياسية الصغرى
Chicory & sowthistleworm	دودة السريس والجلوبين النصف قياسية

Host plants: Cabbage, cauliflower, broccoli, kale, rape, turnip, tomatoes, eggplant, squash, watermelon, cucurbits flowers, soyabean, alfalfa, cotton, okra, table beet & sugar beet, etc.

Geographical distribution: All parts of the world Canada, America, South America, Austratia, Europe, Asia, Africa, Mediterranean countries and in Egypt.

Pest status: One of the most moderate semilooper insect pest on cabbage, cauliflower, all vegetables, cotton, okra fruits, malva, cucurbites, legumes, asteraceous plants etc., in all regions of Egypt.

11- *Trichoplusia ni* (H., 1800) (*Phytometra* and *Plusia*)

Greater cabbage looperworm	دودة الكرنب القياسية الكبرى
Sweet potato semilooper worm	دودة البطاطا القياسية

Host plants: All crucifers plants, cucurbits, legumes, solanaceous crops, cotton, okra, malva, hemp, carrot, lettuce, onion, garlic, radish, rocket, peppermint, ground nut, Egyptian lupin, spinach, artichoke, sorrel, beet and sugar beet, sesame, flax celery sunflower, chrysanthemum, hollyhock, sweetpea, tobacco, chard beet, lettuce, dandelion, curly dock, ground nut, sweet potato, etc.

Geographical distribution: Cosmopolitan

Pest status: The second pest of cabbage after *Aut.gamma* spreads in all parts of Egypt infesting all crucifers, legumes, cucurbits, asteraceous, Malvaceous crops.

Family: Noctuidae

12- *Spodoptera exigua* (H., 1803)

Lesser cotton leaf worm دودة ورق القطن الصغيري
Beet root leaf worm دودة ورق البنجر (دودة البنجر)
Beet armyworm دودة البنجر الجياشة

Host plants: Cotton, okra, malva, tomatoes, egg plants, peppers, table beet, sugar beet, cabbage, cauliflower, broccoli, kale, rape, turnip, mustard, radish, rocket, onion, garlic, lettuce, celery, parsley, artichoke, sorrel, peppermint, flax, lentil, ground nut, Egyptian lupin, cucurbits crops, alfalfa, soyabean, clover, fenugreek, chick pea, peas, kidney bean, brooad bean carrot etc.

Geographical distribution: Cosmopolitan species of world wide distribution.

Pest status: Sporadic insect pest acts as a major best on table beet and sugar beet, and all vegetables in Egypt and in the world.

Family: Noctuidae

13- *Spodoptera littoralis* (Boisd., 1833)

Greater cotton leafworm دودة ورق القطن الكبرى

Host plants: A polyphagous pest attack most vegetables i.e., crucifers, cucurbits, legumes, cotton, okra, malva, hemp, carrot, alfalfa, clover, soyabean, lettuce, ground nut, Egyptian lupine, peas, broad bean, chickpea, fenugreek, lentil, flax, carrot, peppermint, celery, parsley, onion, garlic, sorrel, beet, sugar beet, spinach, common purslane, sesame, tomatoes, peppers, cumin, safflower, sunflower, chamomile, artichoke, oleander, rocket, raddish, sweet potato, etc.

Geographical distribution: Cosmopolitan pest.

Pest status: Very harmful pests of all the above mentioned plants in all parts of Egypt.

Family: Noctuidae

14- *Helicoverpa armigera* (1808) (*Heliothis*)

American cotton bollworm دودة اللوز الأميركية
Tomato fruitworm دودة ثمار الطماطم
Tobacco bodworm دودة براعم الدخان

Host plants : All vegetable crops from curucifers plants, cucurbits, legumes, especially tomatoes, eggplant, squash, watermelon, sweet melon, cantaloupe, cucumber, Egyptian lupin, soyabean, peas, kidney bean, mung bean, cow bean, sesbane, chickpea, fenugreek, lentil, pepper mint, cotton, okra, malva, musk mallow, hollhock, hemp, privet, jasmine, sesame, corn, sorghum, millet, oats, sunflower, carnation, safflower, onion, garlic, roses, strawberry, mulberries, clove pink, sycamore, guava, asparagus, celery, parsley etc.

Geographical distribution: Cosmopolitan

Pest status: A serious pest on cotton bolls, okra fruits, cucurbits frutis, legumes fruits, cabbage, cauliflower, kale,

rape, broccoli, tomato, sweet potato, cucumbers, squash, pumpkin, spinach, artichoke, celery, parsley, lettuce, beet roots, corn, sorghum and millet heads in all parts of Egypt.

Family: Noctuidae

15- *Helicoverpa nubigera* (Herr- Schaff.,1851) (= *Heliothis*)

Egyptian lupinworm دودة الترمس المصري
Kidney bean armyworm دودة الفاصوليا
Mung bean budworm دودة براعم اللوبيا الشعاعية
Cow bean budworm (Cowpea) دودة قرون اللوبيا البادي
Peas pod worm دودة قرون البسلة

Host plants: Egyptian lupin (main host), kidney bean, cow bean, watermelon, cucurbits, tomatoes, cabbage, mustard, cauliflower, etc.

Geographical distribution: Italy (sicily), Cyprus & Egypt.

Pest status: The species acts as a pest of the Egyptian lupin, kidney bean, cowbean, peas and all legumes in Egypt especially in upper Egypt.

Family: Noctuidae

16- *Agrotis ipislon* (Hufnagel, 1766)

Dark sword grass moth فراشة الدودة القارضة ذات السيف الغامق
Black greasy cutworm الدودة القارضة الشحمية السوداء
Greater cotton seedling cutworm دودة بادرات القطن القارضة الكبرى
Vegetables seedling cutworm دودة بادرات نباتات الخضر القارضة

Host plants: Polyphagus insect pests infesting all vegetables seedlings, cotton, okra, crucifers crops, legumes, cucurbits, solanaceous crops, beet, sugar beet, celery, parsley, dill, peppermint, cereal seedlings, ornamental and medicinal plant seedling, Bermuda and ryegrass, sweet potato, spinach, artichoke, lettuce, carrot, etc.

Geographical distribution: Cosmopolitan pest.

Pest status: Sporadic serious pest in all the previous plant crops in all parts of Egypt on cotton, legumes, crucifers, cucurbits, asteraceous crops seedlings.

Family: Noctuidae

17- *Scotia segetum* (Dennis & Schiffer., 1775) (*Agrotis*)

Turnip cutworm دودة اللفت القارضة

Host plants: Vegetable seedling i.e., turnip (maim host), mustard, cabbage, kale, rape, broccoli, leeks, peppers, spinach, beet root, sugar beet, cotton, onion, garlic, celery, parsley, dill, spinach, artichoke, carrot, asteraceous plants, etc.

Geographical distribution: USA, Australia, Europe, Africa, Asia, Middle East, Egypt.

Pest status: A serious insect pest in the new reclaimed land in Egypt infesting crucifers crop seedlings especially turnip and mustard, and all vegetable seedling in Nile valley and all upper Egypt.

Family: Noctuidae (Previously: Arctiidae and Noctuidae)

18- *Earias insulana* (Boisd; 1833)

Egyptian spiny bollworm دودة اللوز الشوكية المصرية
Okra spiny fruitworm دودة ثمار الباميا الشوكية
Hollyhock spiny flower worm دودة ازهار الخطمية الشوكية
Corn-ear spiny worm دودة كيزان الذرة الشوكية
Hemb fruit spinyworm دودة ثمار التيل الشوكية
Cotton spotted bollworm دودة لوز القطن المنقطعة (البرقات)

Host plants: All malvaceous plants, cotton, okra, Syrian rose (*Hibiscus* spp.), rosella, musk mallow, changeable rose, tarter, malva (mallow), hollyhock, marsh mallow, Egyptian hemp, corn, rice, sugarcane, etc.

Geographical distribution: Europe, Near East, Middle East, Japan, Taiwan, Philippines, Australia, Africa, Hawaii and Egypt.

Pest status: The Egyptian cotton spiny bollworm, *Earias insulana* came the second in its serious damage on cotton bolls after the pink bollworm, *Pectinophora gossypiella* (Saunders) (Gelechiidae) in Egypt. The larvae pore in newly cotton branches having blossoms or leaves buds and also on okra branches leaves or flowers. The larvae tunnel into the flower or leave buds and bolls which become brown and fall off, secondary invasion by fungi and bacteria have been occurred. The larvae ranged from 13-18 mm long, spiny and mottled dark brown and black colours. The main host is cotton, okra, hemp, mallow, hollyhock, rosella (carcade), corn ears in all parts of Egypt. The size of moths in Sinai, upper Egypt and kafr El-Sheikh are somewhat small of a bout 12-20 mm wingspan and 4-5 mm long.

Family: Pyralidae

19- *Etiella zinckenella* (Treit, 1832)

Cowpea pod worm	دودة قرون اللوبيا
Kidney bean pod worm	دودة قرون الفاصوليا
Lima bean pod borer worm	دودة قرون فاصوليا ليما
Soyabean pod worm	دودة قرون فول الصويا
Pea pod worm	دودة قرون البسلة

Host plants: Cowpea, kidney bean, limabean bean, mung bean, gram, vetch, lebeck tree, camel thorn, pigeon pea, atropa, sesban, futna, acacia, alfalfa, soyabean, broad bean, chick pea, Egyptian lupin, lentil, etc.

Geographical distribution: Worldwide in all parts of the world. Europe Africa USA, Canada, Australia, Asia, Middle and Near East and Egypt.

Pest status: Very common as minor pest throughout Egypt infesting all legumes pods especially cowpea soyabean, gram, lucerne, vetch, lentil, pea, and kidney bean.

Family: Pyralidae

20- *Euzophera osseatella* (Triet., 1832)

Eggplant stem borer	حفار ساق الباذنجان
Potato branch borer	حفار فروع البطاطس
Pepper stem borer	حفار ساق الفلفل

Host plants: Eggplant, tomatoes, potatoes, peppers, black night-shape, henbane, datura, tobacco, etc.

Geographical distribution: Europe i.e., England, France, Portugal, Spain, Italy Cecily, Sardinia, Corsica, Croatia, Greece, Cyprus, North Africa (Mediterranean regions), Middle and near East, Asia, Australia, and Egypt.

Pest status: The larvae of eggplant stem borer pore in the stems of eggplant, tomatoes, potatoes, peppers, bores stems towards roots causing defoliation of plants. The species is widely spread in all parts of Egypt.

Family: Pyraustidae

21- *Antigastra catalaunalis* (Dup., 1833)

Sesame podworm	دودة قرون السمسم
Sesame webworm	دودة السمسم الناصجة

Host plants: Sesame pods, duranta, white rock – rose (*Helianthemum spp.*) snapdragon (*Antirrhinum*)

Geographical distribution: Tropical countries, Africa, South America, India, Bangladesh, Srilanka, Burma, and Egypt.

Pest status: The species act as a minor pest on sesame pods.

Family: Pyraustidae

22- *Diaphania indica* (Saunders, 1851) (Margaronia)

Cucumber and melonworm	دودة الخيار والشمام
Pumpkin and squashworm	دودة القرع العسلي وقرع الكوسة
Calabash gourd bottleworm	دودة القرع القطني (قرع كلاباش)
Egyptian luffaworm	دودة اللوف المصري (كيزان اللوف)
Levant cotton worm	دودة قطن ليفانت

Host plants: All cucurbits i.e., cucumber, melon, bitter melon, pumpkin, squash moschata, honey gourd, snake-cucumber, musk-melon, Egyptian melon, watermelon, scarlet gourd, kunduri, sponge gourd (Egyptian luffa), calabash bottle gourd Levant cotton, chate of Egypt, vegetable marrow, cantaloupe melon, hairy cucumber, apple cucumber, musky gourd etc.

Geographical distribution: All parts of the world-cosmopolitan.

Pest status: Cucumber or melon worm acts as a moderate insect webworm pest in all regions of Egypt planting cucurbits crops.

Famil: Pyraustidae

23- *Helhula undalis* (F., 1781) (=Pyralis, Phalaena & Evergestis)

Cabbage root and leaf worm	دودة جذور وأوراق الكرنب
Collards cabbage worm	دودة كرنوب السلطة

Host plants: Cabbage, cauliflower, broccoli, collards cabbage, kale, rape, mustard, spoon cabbage, violet cabbage, turnip, wall-rocket, radish, Brussels sprouts, capers, filinder, caper berry. Indian cadaba, etc.

Geographical distribution: Canada, USA, South America, Australia, Africa, Europe, Mediterranean countries, Middle East, Asia, Pacific and Egypt.

Pest status: The cabbage rootworm acts as a moderate pest on cabbage in all region of Egypt.

Family: Pyraustidae

24- *Spoladia recurvalis* (F., 1775) (Hymenia)

Hawaiian beet webworm	دودة بنجر هاواي الناصجة
Beet root webworm	دودة بنجر المائدة الناصجة
Sugar beet webworm	دودة بنجر السكر الناصجة
Soyabean webworm	دودة فول الصويا الناصجة
Cotton beet webworm	دودة أوراق القطن الناصجة

Host plants: Beet root, sugar beet, chard beet, Mexican tea, golden sorrel, rhubarb sorrel, water –dook, spinach dock, sea-orache, cotton, corn and amaranth, etc.

Geographical distribution: Cosmopolitan species.

Pest status: Moderate pest on beet, sugar beet, soyabean, cotton, corn, chard beet, sorrel, spinach in all parts of Egypt growing table and sugar beeb.

Family: Plutellidae

25- *Plutella xylostella* (F., 1758) (= *Plutella maculipennis* Curtis, 1832)

Diamond back moth	الفراشة ذات الظهر الماسي
Cabbage webworm	دودة الكرنوب الناصجة
Cabbage leafminer	صانعة انفاق اوراق الكرنوب
Cabbage moth	فراشة الكرنوب

Host plants: All Brassicaceae (Cruciferae) i.e., cabbage, cauliflower, broccoli, kale, rape, Brussels sprouts, turnip, mustard, radish, rocket, peppers capers, collards, wall-rocket, oil seed rape, violet cabbage, koharpi and watercress, etc.

Geographical distribution: Cosmopolitan North America (1854), all Europe, Southeast Asia, Australia, New Zealand, All African countries, Asia and Egypt.

Pest status: The diamond back moth is widely distributed in all regions of Egypt infesting cabbage, cauliflower, broccoli, kale, rape and all Brassicaceous crops of moderate damage.

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أهم الأفات ذات الأهمية الاقتصادية من رتبة حرشفية الأجنحة التي تصيب محاصيل الخضر في مصر على كامل على رحومة معهد بحوث وقاية النباتات – مركز البحوث الزراعية – دقى - جيزة

تضمنت الدراسة الحالية تحديث الأسماء العلمية واقتراح الأسماء العامية والشائعة لعدد ٢٥ نوعاً من رتبة حرشفية الأجنحة كآفات على محاصيل الخضر في مصر يتبعون الفصائل الآتية: Families: Gelechiidae-Geometridae- Noctuidae Pyralidae- Pyraustidae and Plutellidae العالمية ومنها شبكة Wikipedia ومراجعة الأسماء المرادفة Synonyms المرادفة لها . اما بالنسبة للأسماء العامية common names والأسماء الدارجة vernacular names المصاحبة للأسماء العلمية تم اقتراح الأسماء العامية لأنواع التي ليس لها أسماء دارجة وذلك بإتباع القواعد العلمية الثمانية المعروفة عالمياً لاقتراح وإنشاء الأسماء العامية ومنها اللون العام للفرشاشات والصفات التقسيمية والعوائل النباتية والتوزيع الجغرافي وحجم الفرشاشات وأهميتها الاقتصادية الخ تقدم البحث المعلومات الكافية للعوائل النباتية التي تهاجمها تلك الآفات على مستوي مصر والعالم كما اهتم البحث بالتوزيع الجغرافي لهذه الأنواع على مستوي مصر والعالم ، كما تطرق البحث إلى الأهمية الاقتصادية لهذه الأنواع وانتشارها على العوائل المختلفة في مصر تحت اسم Pest status . عرض البحث احدث المراجع العلمية التي ساعدت في عرض المعلومات الكافية حول انتشار هذه الأنواع وعوائلها النباتية والأسماء العلمية الحديثة وكذلك الأسماء العامية والأهمية الاقتصادية. تتضح أهمية العمل الحالي في إعطاء الاسم العلمي الحديث والاسم العامي لخدمة أهداف البحوث الحشرية في جميع المجالات العلمية ومنها حصر الآفات وتربية الحشرات والمكافحة المتكاملة والحجر الزراعي الجمركي والتدريب والارشاد الزراعي والتعليم الزراعي والنشرات العلمية الزراعية. ومعرفة عوائلها النباتية لخدمة أهداف الحصر ودراسة التنوع البيئي للحشرات وأنواع النباتات في جميع أنحاء جمهورية مصر العربية . وهذا البحث من الأبحاث التي تقدم تبسيط العلم وتجميعه بصورة ميسرة لجميع الباحثين في هذا المجال الحيوي .