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Short reports

Marasmarcha ehrenbergianus (Zeller) (Lepidoptera: Pterophoridae) as Pea Budworm in Iran, H. ALIPANAH and A. PAZUKI, Plant Pests and Diseases Research Institute, Tehran

Pea Budworm is one of the most important pests of Chick Pea in western parts of Iran. Firstly, In 1986 Noori collected it from Kermanshah region and Pazuki identified it as *Marasmarcha sp.*. Further material collected from Kermanshah (Mirzayans & Abai, 1972), West Azarbaijan (Abai, 1975), Kordestan (Mirzayans & Abai, 1972, 1975), Ilam (Gharali, 2002) and Lorestan (Kia, 2003).

Re-identifying and precise investigation of the structure of the genital organs of the specimens deposited in the Hayk Mirzayans Insect Museum (HMIM) directed us to determine it as *Marasmarcha ehrenbergianus* (Zeller, 1852). This is the first record of this species for the fauna of Iran.

Diagnosis: Wingspan 20-24 mm.; fore wing reddish light brown with a yellowish white patch at the crotch of the fist and second lobe and a yellowish white band at the base of dorsum, extended to 1/3 of its length; hind wing reddish brown and darker, usually female paler and bigger than male.

In the male genitalia valvae and saccular processes symmetrical, distal part of valvae rectangular with a more or less tiangle process externally, saccular processes curved inward; female genitalia with a big ostium bursae and two elongate signum in the median part, ductus bursae slender and extended with a pear shaped antrum.

New Record of three Scale Insects (Hem.: Coccoidea) from Iran, M. MOGHADDAM, Plant Pests and Diseases Research Institute, Tehran, Iran.

Among the collected specimens from different areas in Iran, one armoured scale and two mealybugs were determined for the first time.

1- Kuwanaspis howardi (Cooley) (Diaspididae)

2- Phenacoccus arthrophyti Archangelskaya (Pseudococcidae)

3- Planococcus minor (Maskell) (Pseudococcidae)

K. howardi was collected from Māzandarān-Noshahr-Sarcheshmeh on *Bambusa* sp. in 31. VII. 2002 by Moghaddam and Nematiān. This species was distributed in Azarbaijan. Caucasia, China, South Asia and North America. It activities on stem by branching basis of leaves.

P. arthrophyti was collected from Yazd on *Haloxylon* sp. in September 2001 by Shams. This species was distributed in Palaearctic region from Mongolia, Tadzhikestan and Turkmenistan. This species lives as an inquiline insect in galls of leafhopers.

P. minor was collected from Tehran, on Cyperus alternifolius in 11. VIII. 2001 by

F. Parsi. This species is polyphagous was distributed in a wide range of the world.

First report of 1 subfamily, 2 genera and 14 species of mantids (Hex., Mantodea) from Iran. M. MOFIDI NEYESTANAK, Plant Pests and Diseases Research Institute, Tehran, IRAN

More than 1500 specimens of mantids in the Hayk Mirzayans Insect Museum (HMIM) of Plant Pests and Diseases Reseach Institute (PPDRI) were re-examined and identifired as 3 families, 9 subfamilies, 33 species and 6 subspecies in which subfamily of Vatinae, two genera of *Armene* Stal and *Xenomantis* Uvarov and 14 species are the first reports for Iran insect fauna:

- Amblythespis nigrofasciata Kalt. (Mantidae: Oxythespinae) (Province of Sistan-Baluchestan: Ghasreghand)
- Armene pussilla Ev. (Mantidae: Amelinae) (Province of Golestan: Aghghela)
- Ameles arabica Uv. (Mantidae: Amelinae) (Province of Hormozgan: Bandarabbas)
- A. decoor Charp. (Mantidae: Amelinae) (Province of Bushehr: Hkurmoj)
- A. picteti Sauss. (Mantidae: Amelinae) (Province of Tehran: Evin)
- *A. spallanzania* (Rossi) (Mantidae: Amelinae) (Province of Sistan-Baluchestan: Iranshahr, Alidar)
- Elaea marchali Reiche and Fairmaire (Mantidae: Liturgusinae) (Provinces of Sistan-Baluchetan: Nikshahr, Bahukalat, Irabshahr; Hormozgan: Minab, Bashagerd, Sirik, Isin)
- *Hierodula romantis* Stal (Mantidae: Mantinae) (Province of Azarbaijan-e Sharghi: Jolfa, Alamdar)
- Iris coeca Uv. (Mantidae: Mantinae) (Province of Khuzestan: Ahavaz)

- I. Pitcheri Kalt. (Mantidae: Mantinae) (Province of Hormozestan: Gheshm Island, Dargahan)
- I. Splendida Uv. (Mantidae: Mantinae) (Province of Sistan-Baluchestan: Bampur)
- Microthespis evansi Uv. (Mantidae: Mantinae) (Province of Sistan-Baluchestan: Nikshahr, Tang-e Sarhe)
- Xenomantis palmonii Uv. (Mantidae: Vatinae) (Province of Ghom: Ghom salt lake)
- *Empusa fasiata* Brulle (Empusidae: Empusinae) (Provinces of Ghom: Ghom and Kermanshah: Dalahu Pol-e Zahab)

Geographical distribution of *Tomato yellow leaf curl virus* in Iran, K. BANANEJ; M. ESKANDARI and S. JALALI, Dept. of Plant virus Research, Plant Pests and Diseases Research Institute, Tehran-Iran; Dept. of plant pests and diseases research, Agricultural Research Center, Khorasan-Iran; Dept. of plant pests and diseases research, Agricultural Research Center, Isfahan-Iran.

The Tomato yellow leaf curl virus (TYLCV), a whitefly-transmitted Begomovirus, is one of the most devastating pathogens affecting tomato cultures in tropical and subtropical areas in the world. It caused high yield losses in some tomato fields of Joradan Valley (93 to 100%). Tomato yellow leaf curl virus was reported from southern provinces of Iran (Bushehr, Hormozgan, Kerman and Sistan-Baluchestan) on 1996. An intensive survey was conducted during 1998-2001, to identify TYLCV infection in some tomato (Lycopersicum esculentum) fields in Central, North and northeast provinces of Iran (Markazi, Isfahan, Tehran, Mazandaran, Golestan, Semnan and Khorasan provinces). Tomato plant samples with leaf curling and stunting symptoms resemble to TYLCV infection were collected from different tomato fields. The disease symptoms were transmitted to healthy tomato plants (L. esculentum cv. Red-Cloud) by grafting but not by mechanical inoculation. The presence of coat protein and genome of TYLCV in extracts of samples were determined by using of two different techniques: dot-immunobinding assay (DIBA) and polymerase chain reaction (PCR). In PCR technique, total DNA was extracted from leaf tissue of both symptomatic and healthy tomato plants. One primer pairs, BsiWl(c)/BsiWl(v) for TYLCV-Ir genome were employed. PCR products for each samples was electrophoresed in 1.0% agarose gel and visualized by staining with ethidium bromide and UV illuminator. In DIBA and PCR techniques, the coat protein and genome of TYLCV were detected in extracts of naturally infected tomato plants,

which collected from different geographically distinct regions (except samples from Semnan province), respectively.

The failure to detect TYLCV from Central, North and northeast provinces of Iran by Hajimorad et al.1996, and receiving no complaints from growers or agricultural research scientists regarding to TYLCV, may indicate that TYLCV infection or its spread to these regions has occurred in recent years (between 1996 to 2001). Molecular characterization of Iranian TYLCV isolates (some parts of genome), presented in this study and sequence comparison with TYLCV-Ir (Acc. No. AJ132711) found to be necessary for understanding of relationships between different isolates.