Report of predator beetle Cybocephalus fodori minor on pistachio oyster shell scale ...

Report of predator beetle *Cybocephalus fodori minor* (Col.: Cybocephalidae), on pistachio oyster shell scale *Lepidosaphes pistaciae* (Hom.: Diaspididae) from Iran; Eng. J. Kolahdooz Shahroodi¹*, Dr. H. Seyedoleslami² and Dr. R. Ebadi². Department of Plant Pests and Diseases, Agricultural Research Center of Varamin, Tehran, Iran¹; Department of Entomology, College of Agriculture, Isfahan University of Technology, Iran². j55entomo@yahoo.com*.

During 2001 Two subspecies from two different species of Cybocephalid beetles were collected in Isfahan orchards. The specimens were sent to China and confirmed by professor Ming yi Tian as new records from Iran. One of the species was identified as Cybocephalus nigriceps palmarum (Peye.) that previously was reported from Iran by Rajabi in 1960 (RAJABI, GH. R. 1989. Tortious insects of frigorific fruit trees in Iran. Agricultural Reasearch Organization and Natural Resources. Volume 3, Homoptera. 256 pp.Tehran.). The second was identified as Cybocephalus fodori minor (End. You.) an active predator of the pistachio oyster shell scale Lepidosaphes pistachio (Arch). The species and subspecies are new records for Iran and a new record on pistachio oyster shell scale in the world respectively. This predatory beetle was also collected from other hosts such as ficus oystershell scale, Lepiosaphes conchiformis on elm trees, apple oystershell scale, Lepidosaphes malicola on apple trees and scales on apricot, apple, pear and almond trees. The specimens were collected by J. Kolahdooz in Chah anari region of Isfahan University of Technology, Najafabad, forest park of Habibabad, Shervedan, Gaz and Borkhar. The adult of C. fodori minor is shiny black in general. Female is 1087.72 \pm 16.56 and male 1047.88 \pm 18.93 µm in length with head and thorax bent. Antenna is 11-segmented and terminal segment of club is oblong (ENDRODY-YOUNGA, S. 1968. Monograph on Palaearctic Species of Family Cybocephalidae (Col.: Clavicornia). Acta Zool. Acad. Sci. Hung. 14: 27-115) (in Hungarian). It can be easily distinguished from other species by the stout penis and the shape of basal plate of the male genitalia (personal comunication with professor Ming yi Tian from China). In this subspecies eggs are oblong, fusiform and white. There are three carabiform larval instars could be distinguished from each other by the width of the head capsule. They are elongate, cylinderical and milky white. Pupa is exarate and milky white and is formed in soil cells (Katsoyannos, P. 1984. Notes on life history and field efficiency of Cybocephalus fodori predator of Quadraspidiotus perniciosus in northern Greece. Entomologia Hellenica. 2 (2), 35-40). These two sympatric subspecies could be distinguished from each other by comparing number of antennal segments, shape of antennal club and foretibia, color of antennae and legs, and shape of genitalia in males (including penis and basal palate).