

Incidence of Infestation on the Native Tree (Araak) by the Psyllid *Euphyllura obsoleta* Mathur (Homoptera: Psyllidae) in Southern Saudi Arabia

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Abstract. Quite a diverse fauna of the jumping plant lice or psyllids, a group of sap-sucking homopterous insects is well represented in northern Africa, the Arabian Peninsula and their range extended further in central Asia [1]. Recent collection surveys in Saudi Arabia revealed that more than 13 species have been recovered [2, pp 141-149,3,4]. The psyllids are notorious pests in Saudi Arabia. Since recently becoming sort of cosmopolitan pests that pose a great threat to agriculture production and overall expansion. Currently severe damage to both wild plants and commercial crops (producing exactly similar typical symptoms on both groups) is effected because the devastation that wiped out most citrus orchards and the traditionally lush citrus ecosystems in western region of Saudi Arabia was blamed squarely on the citrus greening disease. The pathogen of this disease is only vectored by the oriental psylla vector *Diaphorina citri* Kuwayama [5-7].

During a recent survey in Bisha area (75 km north of Jizan), Southern Saudi Arabia in 1988 heavy infestation of typical psyllid symptoms was observed on the medicinally useful wild plant (araak) *Salvador persia* L. (family: Salvadoraceae). This is a well distributed glabrous dioecious trees or shrubs with white branches which grow in Hidjaz and southern regions predominantly in non-man's land. The typical symptoms of a plant-sucking homopteran pest was observed where the wrinkling crumpling and upward puckering of leaves were clearly exhibited in the new flushes of emerging growth (Fig. 1) and in old leaves (Fig. 2). In old heavily infested leaves severe crumpling and leaf-surface distortion was manifested. Samples of infested leaves were taken to the laboratory for further investigations. The studies revealed the presence of immature nymphs and mature individuals of a hompteran psyllid which was the causal agent for these symptoms. The recovered species were photographed then prepared and sent to the British Museum (Natural History) (BMNH) for identification. Photos were taken using the microscope and electron microscope was also made. Results of the indentification proved that the psyllid involved is *Euphyllura obsoleta* Mathur which Burckhardt [2] has recovered from another species of Araak *Salvador oleoides* Dene. More data should be obtained concerning the advancement of the psyllid infestation or otherwise suppression measures enacted to preserve this valuable native medicinally important tree which supplies the majority of citizens with natural branches and roots used for teeth brushing (Miswaak).

References

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Fig. 1. The typical leaf-wrinkling and upward puckering on new growth of the terminal leaves on the Araak tree by the Psylla *E. obsoleta* Marthur.



Fig. 2. Old leaves of Araak tree exhibiting heavy infestation by the psylla *E. obsoleta*

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إصابة شجرة الأراك في جنوب المملكة العربية السعودية بإحدى حشرات
البنسيليد التابعة لرتبة متشابهة الأجنحة

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ملخص البحث . شوهدت أعراض إصابة على أشجار وشجيرات النبات الطبي الأراك والذي ينتشر انتشاراً واسعاً في منطقة بيشا شمالي جيزان خلال عملية حصر عام ١٩٨٨ م . وقد ظهرت هذه الأعراض في شكل تجمعات وتجمعات للأوراق في النموات الحديثة وفي الأوراق القديمة . وقد أمكن تعريف هذه الحشرة بالمتحف البريطاني للتاريخ الطبيعي بلندن تحت الاسم *Euphyl-lura obsoleta* من العائلة سيليدي رتبة متشابهة الأجنحة .