

Short communication

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New record of ground pearls, *Porphyrophora tritici* (Bod.) (Homoptera,  
Margarodidae) as a pest of wheat in Iraq

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Abstract

The ground pearls, *Porphyrophora tritici* (Bod.) is a new insect pest on wheat recorded for the first time from Mousl Province, North of Iraq.

Wheat *Triticum aestivum* is one of the most important crops in Iraq. It is attacked by several insect pests of which the most important one is the Sunn pest *Eurygaster integriceps* Puton (Hemiptera, Scutelleridae). During spring, 1993, wheat plants of Mousl farms were reported to be damaged by heavy attack of unfamiliar insects. These insects were observed infesting roots and lower parts of the plant. Specimens of these insects were collected and passed to the first author for determination from Dr. F. I. Aziz of the Department Entomology, General Body of Plant Protection, Ministry of Agriculture.

A survey of the literature concerning wheat pests, shows that there are two species of ground pearls, *Porphyrophora tritici* (Bod.) and *Porphyrophora polonica* (L.) distributed throughout the wheat and barely growing areas of western and central Asia (Miller, 1991). *P. tritici* has been originally described from Turkey by Bodenheimer (1941), it is also reported from Iran by Gentry (1965).

In Syria, the species *P. polonica* was reported by Gentry (1965), while *P. tritici* was reported by Duran (1971). The present specimens of ground pearls were in agreement with the description of Bodenheimer (1941) for the species *P. tritici*. Since this species has not been previously known to occur in Iraq (Bodenheimer, 1943, 1944; Derwesh, 1965 and Al-Ali, 1977). It is believed to be the first record for Iraq. It is most probably that it transmitted to Iraq from neighboring countries.

Observation on the nature of damage by ground pearls showed that the female ovipositor in the soil close to wheat roots. The eggs hatch into young nymphs attached themselves to the roots of wheat during its seedling stage. The infestation of wheat root results in stunting and loss of yield due to the constant sucking of plant sap by the nymphs and adult females and may finally lead to death.

Eggs of ground pearls of *P. tritici* are very small, red in colour, found in the soil inside a cottony masses or sacs near the roots of the host-plants.

The first instar nymph is small, red in colour, 0.5-2.0 mm. in length, found on the roots at base of the host plants. It has five segmented antenna, and the legs are terminated in a single claw. The second instar nymph is enclosed in hard waxy cases, red or purple in colour, with particles of soil adhering to them, measuring 3-5 mm. in diameter, found at the base of the host-plant.

Adult female is oval in shape, red in colour and measuring 5-6 mm. in length. Adult male was not seen here.

New recorded of pearls , *Porphyrophora tritici*

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***Porphyrophora tritici* (Bod.)** تسجيل جديد للآليء الارض  
كآفة على الحنطة في العراق

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الخلاصة

لآليء الارض *Porphyrophora tritici* (Bod.) آفة حشرية جديدة على  
الحنطة تُسجل لأول مرة في الموصل ، شمال العراق .