Int. J. Biol. Res., 3(1): 45-47, 2015.

REPORT OF *PORCELLIONIDES PRUINOSUS* (BRANDT, 1833) (ISOPODA, ONISCIDEA, PORCELLIONIDAE) FROM KARACHI, PAKISTAN

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ABSTRACT

From Pakistan 4 prior reports on oniscid terrestrial isopods are available. This is the fifth one and ever first taxonomy report on Family Porcellionidae represented by *Porcellionides pruinosus.* The species is described with illustrations and photographs.

KEYWORDS: *Porcellionides pruinosus*, Isopoda, Karachi, Pakistan

INTRODUCTION

The suborder Oniscidea includes consists of over 4,000 species (Schmalfuss, 2003) occur worldwide in most of the terrestrial habitats. The systematics of terrestrial isopod is complex and ambiguous (Achouri *et al*., 2002). The members of Oniscidea show greater impact in terrestrial ecosystems, especially in tropics. They are destruents occurring in great numbers and some were like *Porcellionides pruinosus* able to adapt to man. Therefore, they became anthropophilous and are cosmopolitan in distribution (Leistikow & Wägele, 1999). It is perhaps the most common terrestrial isopod in the world but it is under-recorded in many areas.

From Pakistan 4 prior reports on terrestrial isopods are present (Schotte, 1993; Kazmi, 2001, Kazmi *et al*., 2000, 2002, Kazmi & Yousuf, 2013). This is the ever first taxonomy report on family Porcellionidae Brandt, 1831from here represented by *Porcellionides pruinosus*. Earlier Zubairi (1990) worked on its physiology, the author did not mention location of his material but most probably it was from Faisalabad since he was working there .The material from Karachi is described and illustrated. The authorities to taxa are not explained in "References"

TAXONOMY

Isopoda Latreille, 1817
Oniscidea Latreille, 1802
Ligiamorpha Vandel, 1943
Armadilloidea Brandt, 1831
Porcellionidae Brandt, 1831

***Porcellionides pruinosus* (Brandt, 1833)**
(Fig. 1A-G, Plate 1)

Material: Five specimens 2-9mm in total length, under flowerpots on window sill, Gulzar-e-Hijri (Long 66"58'00"E Lat. 24 048'00"), Karachi.

Description: The body is oblong, thrice as long as wide (3 mm: 9 mm) in larger animal; two and half times (2mm: 5 mm) in smaller specimen. Margins are scabrous. The surface of the body is slightly granulated. In colour the posterior, median and lateral margins are reddish brown particularly so in smaller specimens. The other parts are a lighter in colour, with wavy lines light yellow on either side of the median line (Plate 1).

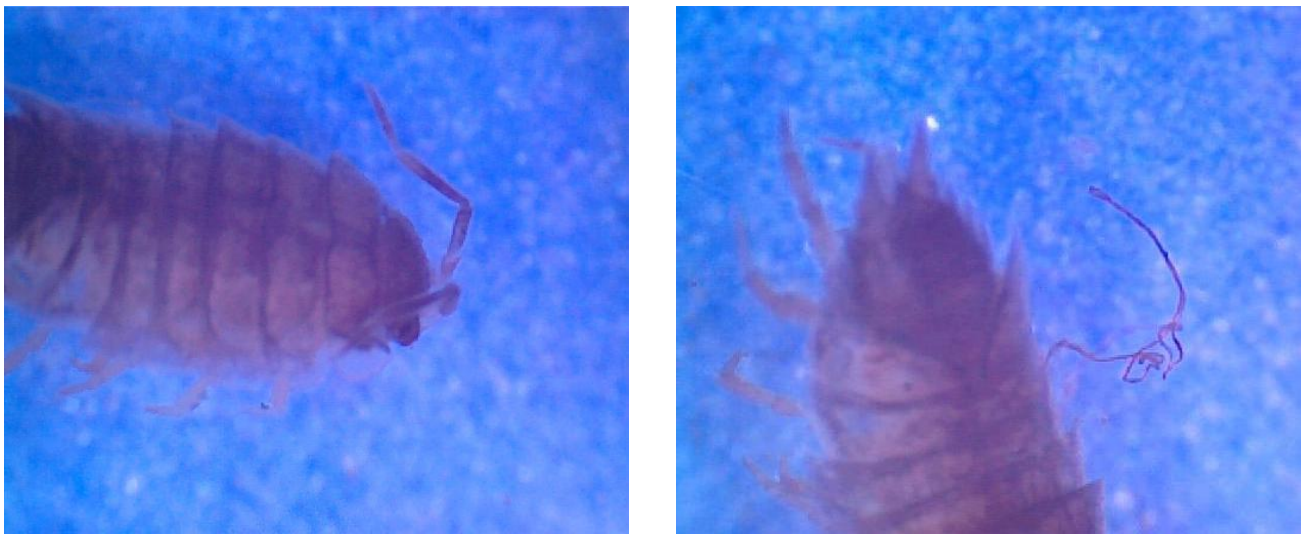
The head (Fig. 1A) is twice as wide as long, with the anterior margin slightly convex; antero-lateral lobes are small.

The eyes are small, composite, and situated at the base of the antero-lateral lobes.

The first segment of the thorax is a little longer. The antero-lateral angles of the first segment are produced forward to surround the head. They extend to the base of the antero-lateral lobes of the head. The epimera are not distinctly separated from the segments.

The abdomen abruptly becomes narrower than thorax (Fig. 1B, B'). Not all six segments are distinct. The first two are covered by the seventh thoracic segment. The third, fourth, and fifth segments have the lateral parts small. The sixth or terminal segment or telson is triangular in shape; the apex is acute.

The first pair of antennae (Fig. 1A) is small. The second pair (Fig. 1C) has the first article short; the second is twice as long as the first; the third is equal in length to the second; the fourth is twice as long as the third; the fifth is one and a half times as long as the fourth; first to fourth articles are carinate .The flagellum is composed of two articles, the first of which is twice as long as the second. The ends second article ends in a brush of stiff setae. The second antennae extends to the posterior margin of the fourth thoracic segment.



A B

Plate 1. ***Porcellionides pruinosus*** **(Brandt, 1833)**
A. Anterior region; B. Posterior part

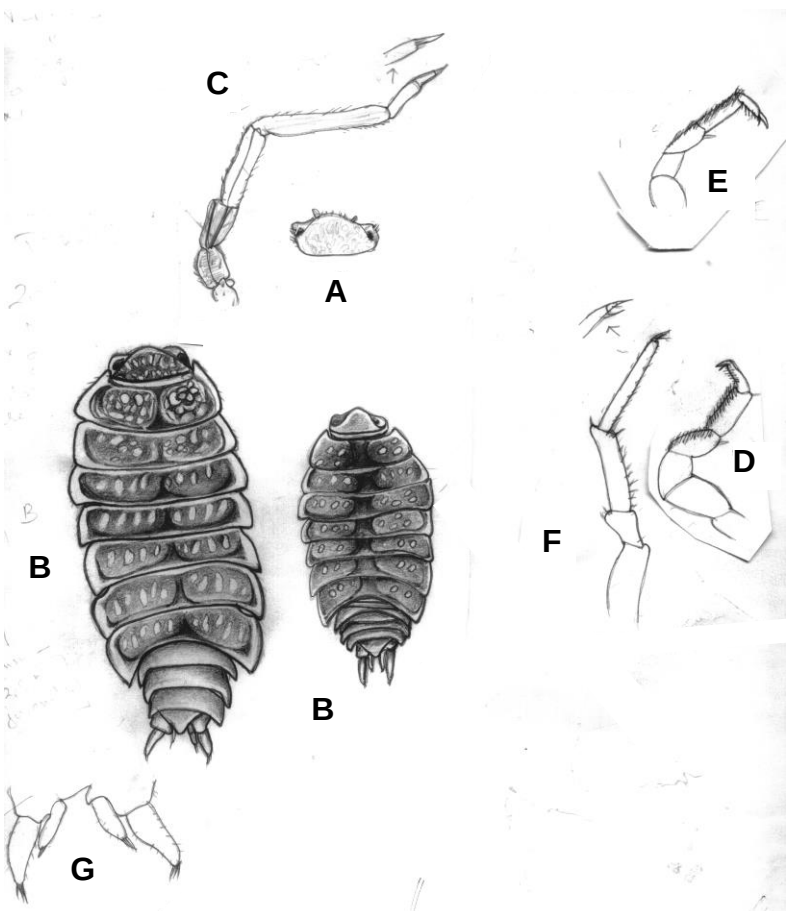


Fig. 1. ***Porcellionides pruinosus*** **(Brandt, 1833)**
A. Head; B, B". Habitus (adult and young respectively); C. Antenna; D-F. Legs; G. Uropods

All the legs are ambulatory (Figs. 1D-F), gradually increasing from anterior to posterior, biungulate, terminating in a strong unguis, the lower unguis is weak. Four pairs of pleopods are present.

The basal article or peduncle of the uropods (Fig. 1G) is not longer than the apex of the terminal abdominal segment. The outer branch extends its entire length beyond the apex of the terminal abdominal segment. The inner branch extends about one-third the length of the outer branch; both the branches have terminal bunch of setae.

Remarks: *Porcellionides pruinosus* is native to the Mediterranean, adventives elsewhere and now cosmopolitan wood louse. It is known to exhibit patterns of geographical variation between populations, and has been suspected to consist of several very closely related species (Salzat *et al*., 2001). Ten subspecies are recognized .Recent investigations have suggested that some populations, although morphologically closely similar, may consist in fact of separate species.For example,what was previously considered to be *Porcellionides pruinosus* in N.America were two separate species. Although these species differ only subtly in morphology, they are electrophoretically, reproductively, and distributionally distinct (Garthwaite and Sassaman, 1985).It would appear that taxonomic status of *Porcellionides pruinosus* is in need of re-evaluation on world- wide basis.

Geographically separated populations are also characterized by different reproductive behaviors (Lefebvre & Marcade, 2005). *Porcellionides pruinosus* are reproductively active from February/ March to August/ October in Tunisia (Achouri *et al*., 2002, 2004), the same period seems to be reproductive in Karachi, Pakistan as the collection was made in the month of November, the sample included the manca stage.

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(Received February 2015; Accepted April 2015)