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First report of the new world thrips genus *Plesiothrips* Hood (Thysanoptera: Thripidae) from India with a note on *Plesiothrips perplexus* (Beach)

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Abstract
The New World grass thrips genus *Plesiothrips* Hood belongs to family Thripidae and recognized by 17 described species around the globe. The genus *Plesiothrips* is recorded from India for the first time based on *Plesiothrips perplexus* (Beach). *P. perplexus* is widespread in tropical and subtropical countries, in association with weedy grasses and is variable in colour and chaetotaxy. Diagnosis and illustrations of *P. perplexus* are given.

Keywords: Grass thrips genus, India, *Plesiothrips*, *Plesiothrips perplexus*, Thysanoptera

1. Introduction
Members of the genus *Plesiothrips* Hood are significant among Thripidae for their weakly developed ovipositor without marginal serrations, which does not extend to the tip of the abdomen. Hence, it is so weak to function in the same way as that of typical Thripidae ovipositor, that is, to insert eggs by tearing the surface plant tissue [1]. Presumably, the eggs are laid within the florets of different grass species, in much the similar way as is known of species of *Arorathrips* Bhatti and *Chirothrips* Haliday that also have weak ovipositor with only faint serrations [2].
The genus *Plesiothrips* erected by Hood in 1915 comprises of 17 described species worldwide [1]. The genus is characterised by the presence of a pair of dorso-apical setae on the first antennal segment; anterior ocellus situated anterior to front margin of compound eyes and highly reduced ovipositor without reaching apex of abdomen. Males have unusually small antennal segment III and greatly enlarged segments IV–VI with numerous long setae; tergite IX bears a pair of drepanae and sternites III and IV bear a pair of circular pore plates [1, 3]. The species of *Plesiothrips* are unique among New World Thripinae in having antennal segment I with a pair of dorso-apical setae [1].
Plesiothrips occurs only in the New World, except for *Plesiothrips perplexus* (Beach) that has become widely spread across the tropics and sub-tropics on grassy weeds [1]. However, there are no reports on the genus and occurrence of *P. perplexus* in India. The objective of this paper is to report the first record of genus *Plesiothrips* with a note on *P. perplexus* from India.

Materials and Methods
Extensive random taxonomic surveys were conducted from 03rd to 10th March 2016 at Agartala, Tripura (23^0 76' 28'' N, 91^0 26' 33''E, 17 m AMSL) for collection of insects. Collected specimens were preserved in thrips collecting media (9 parts 10% alcohol + 1 part glacial acetic acid + 1 ml Triton X-100 in 1000 ml of the mixture). Specimens were mounted in Canada balsam for permanent preservation. The specimens were collected at random, subsequently sorted out and identified using appropriate keys [1].

Results
Plesiothrips perplexus (Beach)
Female Macroptera: Head and thorax brown; abdomen light yellow, segments IX and X darker (Fig 1); antennae brown, 7 segmented; segment III light yellow, IV light brown, segments III and IV with forked sense cones, IV longer than III (Fig 2). Head produced in front to form a triangular area, anterior ocellus on the triangular area, anterior to front margin of compound eyes; interocellar setae situated just above the inner side of posterior ocelli.

Cheeks concaved behind bulged compound eyes (Fig 3). Pronotum same length as head, slightly wider than head, two pairs of long posterolateral setae, three pairs of posteromarginal setae (Fig 4). Forewing slender, upper vein with 13 + 2 setae. Posterior margin of tergite VIII without marginal comb; tergite X split completely; sternites without discal setae, highly reduced ovipositor without marginal serrations (Fig 5).

Fig 1: *Plesiothrips perplexus* (Beach)

Fig 2: Antennae

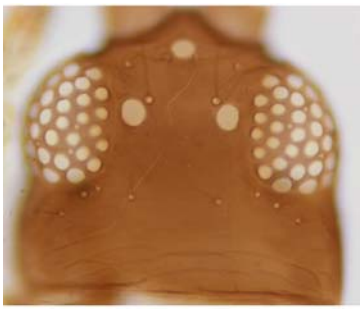

Fig 3: Head dorsal

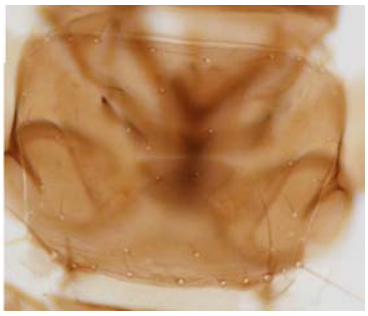

Fig 4: Pronotum

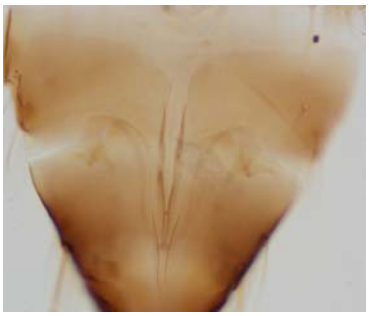

Fig 5: Ovipositor

Material studied: India, Tripura, Agartala, 2 females, Yellow pan trap, 06-iii-2016, Prashanth Mohanraj. All specimens have been deposited in the National Bureau of Agricultural Insect Resources (ICAR-NBAIR), Bengaluru, India.

Distribution: India (Tripura), Taiwan, USA, Porto Rico, Cuba, Fiji, Australia, Hawaii, Solomon islands

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