

Thysanoptera collected around port area in East Japan

I. Kanto-region

Masami MASUMOTO*, Kenichi KITAGAWA**, Ren IWAIZUMI** and Yoshikatsu ODA*

*Research Division, Yokohama Plant Protection Station,
1-16-10, Shinyamashita, Naka-ku, Yokohama, 231, Japan

**Yokohama Plant Protection Station,
6-64, Kitanaka-dori, Naka-ku, Yokohama, 231, Japan

Abstract: The authors reserched on the thysanopterous fauna in port area at Kanto-region, Central Japan. In this study, 32 species including unknown *Ceratothrips* sp., which is first recorded in Japan.

key words: Thysanoptera, port area, Kanto-region, East Japan, *Ceratothrips*

Introduction

Recently, many kind of plants are imported into japan from throughout every place of the world and those quantity tend to increase. Therefore, these are a great risk that invade many pests such as *Thrips palmi* and *Frankliniella occidentalis* which have caused economic damage to horticultural plants because of the difficulty of its control.

The authors researched on thysanopterous fauna around the some ports from Kanto-region to Hokkaido in East Japan because it is neccessary that the insects fauna arround the sea port and airport area are grasped for discovery of those pests and diseases in eary stage of invading them as above.

Materials and Methods

Thysanoptera discovered around the port area, Yokohama, Tokyo, Chiba, Hitachi and airport of Narita and Haneda of Kanto-region in Central Japan are provided in this paper (Fig. 1).

In principle, this research is done around the each ports imported plants in every spring and autumn. The data of present paper is results of research in 1995 (Yokohama in 1993-1995).

The identification of thrips collected was refered to Bhatti (1992), Kudo (1972, 1984, 1985, 1989, 1991, 1992), Miyazaki and Kudo (1988), Mound *et al* (1976, 1981, 1982), Palmer (1987, 1992), Palmer *et al* (1989), Okajima (1995a, b) and Wilson (1975).

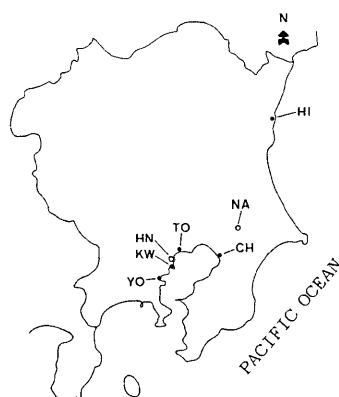


Fig. 1 Map indicating the place where thripid insects were collected in Kanto-region. YO: YOKOHAMA, KW: KAWASAKI, HN: HANEDA, TO: TOKYO, CH: CHIBA, NA: NARITA, HI: HITACHI

Table 1. Ports of researching Thysanoptera.

	Name of port and airport						
	YO	KW	HN	TO	CH	NA	HI
<i>Aeolothrips kurosawai</i>	+	—	—	+	—	—	+
<i>Anaphothrips obscurus</i>	+	+	+	+	—	—	+
<i>Aptinothrips rufus</i>	+	+	—	+	—	—	+
<i>Aptinothrips stylifer</i>	—	—	—	—	—	—	+
<i>Bamboosiella lewisi</i>	—	—	—	—	—	—	+
<i>Ceratothrips</i> sp.	+	—	—	+	—	+	—
<i>Frankliniella intonsa</i>	+	+	—	+	+	+	+
<i>Frankliniella occidentalis</i>	—	—	—	+	—	+	—
<i>Haplothrips aculeatus</i>	+	—	—	+	—	—	+
<i>Haplothrips chinensis</i>	+	—	—	—	—	—	+
<i>Haplothrips niger</i>	—	—	—	—	—	+	—
<i>Heliothrips haemorrhoidalis</i>	+	—	—	—	—	—	+
<i>Hydatothrips abdominalis</i>	—	—	—	—	—	—	+
<i>Karnyothrips</i> sp.	+	—	—	—	—	—	+
<i>Liothrips floridensis</i>	+	—	—	+	—	—	+
<i>Megalurothrips distalis</i>	+	—	—	+	+	+	+
<i>Microcephalothrips abdominalis</i>	+	—	—	+	—	—	+
<i>Mycterothrips glycines</i>	—	—	—	—	—	—	+
<i>Nesothrips</i> sp.	—	—	—	—	—	—	+
<i>Pseudodendrothrips mori</i>	+	—	—	—	—	—	—
<i>Scirtothrips dorsalis</i>	+	+	—	—	—	—	—
<i>Scolothrips takahashii</i>	—	—	+	+	—	+	—
<i>Stenchaetothrips biformis</i>	—	—	—	—	—	—	+
<i>Taeniothrips eucharit</i>	—	—	—	—	—	—	+
<i>Thrips coloratus</i>	+	—	—	+	+	+	+
<i>Thrips flavus</i>	—	—	—	+	—	—	+
<i>Thrips hawaiiensis</i>	+	+	—	+	+	+	+
<i>Thrips nigropilosus</i>	+	+	—	+	—	—	+
<i>Thrips palmi</i>	+	+	—	+	+	—	+
<i>Thrips setosus</i>	—	—	—	—	—	—	+
<i>Thrips tabaci</i>	+	—	—	+	—	+	+
<i>Yoshinotrips pasekamui</i>	—	—	—	—	—	—	+

*: port of YOKOHAMA (YO), KAWASAKI (KW), TOKYO (TO), CHIBA (CH), HITACHI (HI), airport of HANEDA (HN), NARITA (NA)

Results

Collected thrips belong to 3 families, 22 genera including, *Ceratothrips* sp., new to Japan were found (Table. 1, 2).

Table 2. List of thripid species collected from port area at Kanto-region

Suborder	Terebrantia
Family	Aeolothripidae
	1. <i>Aeolothrips kurosawai</i>
Family	Thripidae
Subfamily	Panchaetothripinae
	2. <i>Heliothrips haemorrhoidalis</i>
Subfamily	Thripinae
	3. <i>Anaphothrips obscurus</i>
	4. <i>Aptinothrips rufus</i>
	5. <i>Aptinothrips stylifer</i>
	6. <i>Ceratothrips</i> sp.
	7. <i>Frankliniella intonsa</i>
	8. <i>Frankliniella occidentalis</i>
	9. <i>Hydatothrips abdominalis</i>
	10. <i>Megalurothrips distalis</i>
	11. <i>Microcephalothrips abdominalis</i>
	12. <i>Mycterothrips glycines</i>
	13. <i>Pseudodendrothrips mori</i>
	14. <i>Scirtothrips dorsalis</i>
	15. <i>Scolothrips takahashii</i>
	16. <i>Stenchaetothrips biformis</i>
	17. <i>Taeniothrips eucharis</i>
	18. <i>Thrips coloratus</i>
	19. <i>Thrips flavus</i>
	20. <i>Thrips hawaiiensis</i>
	21. <i>Thrips nigropilosus</i>
	22. <i>Thrips palmi</i>
	23. <i>Thrips setosus</i>
	24. <i>Thrips tabaci</i>
	25. <i>Yoshinothrips pasekamui</i>
Suborder	Tubulifera
Family	Phlaeothripidae
Subfamily	Idolothripinae
	26. <i>Nesothrips</i> sp.
Subfamily	Phlaeothripinae
	27. <i>Bamboosiella lewisi</i>
	28. <i>Haplothrips aculeatus</i>
	29. <i>Haplothrips chinensis</i>
	30. <i>Haplothrips niger</i>
	31. <i>Karnyothrips</i> sp.
	32. <i>Liothrips frolidensis</i>

Remarks

Most species of thripid insects collected in this research are well known till today from Japan, except *Ceratothrips* sp..

Result of this study suggests that other genera or species new to Japan will be discovered around port area by further investigation.

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References

- BHATTI, J. S. (1992) Revision of the Indian species of *Scirtothrips* BAGNALL. Oriental Insects. 16: 385-417
- KUDO, I. (1972) Notes on Thysanoptera collected from Masutomi (Yamanashi), Central Japan. Kontyu 40 (4): 233-243
- KUDO, I. (1984) The Japanese Dendrothripini with description of four new species (Thysanoptera, Thripidae). Kontyu, Tokyo, 52: 487-505
- KUDO, I. (1985) *Yoshinothrips* n. gen. with two new species from Japan (Thysanoptera, Thripidae). Kontyu, Tokyo, 53: 81-89
- KUDO, I. (1989) The Japanese species of *Anaphothrips* and *Apterothrips* (Thysanoptera, Thripidae). Jpn. J. Ent., 57: 477-495
- KUDO, I. (1991) Sericothripine thrips of Japan (Thysanoptera, Thripidae). Jpn. J. Ent., 59: 509-538
- KUDO, I. (1992) Panchaetothripinae in Japan (Thysanoptera, Thripidae). 1. Panchaetothripini, Other than *Helionothrips*. Jpn. J. Ent., 59: 109-125
- MIYAZAKI, M. and I. KUDO (1988) Bibliography and host plant catalogue of Thysanoptera of Japan. Misc. Publ. Natl. Inst. Agro-Environ. Sci. 3: 1-246
- MOUND, L. A., G. D. MORISON, B. R. PITKIN & J. M. PALMER (1946) Handbook for the Identification of British insects Vol. 1, part 11. Thysanoptera. Roy. Ent. Soc. Lond, London 79p
- MOUND, L. A. and A. K. WALKER (1982) Terebrantia (Insecta: Thysanoptera). Fauna of New Zealand, 1: 1-113
- MOUND, L. A. and J. M. PALMER (1981) Identification, distribution and host-plants of pest species of *Scirtothrips* (Thysanoptera, Thripidae). Bull. Ent. Res, 71: 467-479
- PALMER, J. M. (1987) *Megalurothrips* in the flowers of tropical legumes: a morphometric study. In: Population structure, genetics and taxonomy of aphids and Thysanoptera. (HOLMAN, J., J. PELIKAN, A. G. F. DIXEN & WELSMAN eds.), SPB Academic Publishing: The Hague., 480-495
- PALMER, J. M. (1992) *Thrips* (Thysanoptera, Thripidae) from Pakistan to the Pacific: a review. Bull. Br. Mus. Nat. His. (Ent.), 61: 1-76
- PALMER, J. M., L. A. MOUND & G. J. du HEAUME (1989) CIE guides to insects importance to man, 2. Thysanoptera. CAB international Institute of Entomology, London. 73p.
- OKAJIMA, S. (1995) A Revision of the Bamboo- or Grass-Inhabiting genus *Bamboosiella* ANANTHAKRISHNAN (Thysanoptera, Phlaeothripidae). I. Jpn. J. Ent., 63: 303-321
- OKAJIMA, S. (1995) A Revision of the Bamboo- or Grass-Inhabiting genus *Bamboosiella* ANANTHAKRISHNAN (Thysanoptera, Phlaeothripidae). II. Jpn. J. Ent., 63: 469-484
- WILSON, T. H. (1975) A monograph of the subfamily Panchaetothripinae (Thysanoptera, Thripidae). Mem. Amer. Ent. Inst., 23: 1-354

和 文 摘 要

東日本の港頭地域におけるアザミウマ

I. 関東地方

梶本 雅身*・北川 憲一**・岩泉 連**・小田 義勝*

*横浜植物防疫所調査研究部

**横浜植物防疫所業務部

植物防疫所では、各港において侵入害虫を早期発見するために、年2回港頭地域の病害虫相調査を行っている。著者らは、平成7～5年の港頭地域調査において、関東地方から北海道のアザミウマ相の調査を行った。

アザミウマは、様々な種類の植物から発見され、同定の結果、関東地方の7ヶ所の港及び空港からは、日本未記録の *Ceratothrips* sp. を含む3科22属32種が発見された。