Additional List of Aphids (Homoptera: Aphididae) Intercepted at Japanese Plant Quarantine, II

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Abstract: Aphids intercepted recently by plant quarantine were examined. 17 of these are listed as new to the Japanese quarantine records and 6 are reported as interception from the localities which have not been indicated in the past Japanese quarantine records. **Key words:** aphids, list, plant quarantine, intercept.

Introduction

Among aphids intercepted at Japanese plant quarantine mainly on vegetables and cutflowers from 1987 to 1993, 58 species belonging to 6 subfamilies and 37 genera have been identified (SUGIMOTO and KITAGAWA, 1991, 1994). Since the import volume of vegetables and cutflowers showed a yearly increase, many kinds of small pests in size such as aphids, thrips and mites have been intercepted (ODA, 1993). These plants are still continuously imported to Japan from various countries. Therefore some previously unrecorded aphids have been intercepted.

In this paper, we are going to list 17 newly recorded aphids to the Japanese plant quarantine records with their host plants and countries, based on the collection of aphids intercepted at Narita Air Port and Tokyo Sea Port during 1999–2001. Moreover, we are going to list 6 aphids intercepted from the countries which have not been indicated in our past records. The aphids intercepted were identified by Blackman and Eastop's (1994, 2000) identification guides unless otherwise stated.

1. Newly Recorded Aphids to the Japanese Quarantine

An asterisk after the name indicates that the species is not known to occur in Japan.

Family APHIDIDAE Subfamily LACHNINAE

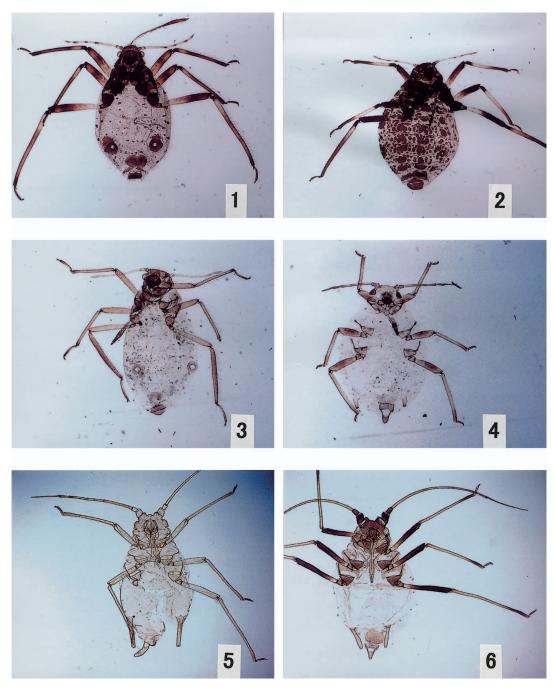
Cinara confinis (Koch)* (Fig. 1.)

Abies procera (noble fir) from Canada (15. Nov. 2000) and Oregon, USA (30. Oct. 2001; 6 & 21. Nov. 2001).

Cinara laricis (HARTIG)* (Fig. 2.)

Larix sp. from Holland (6. Nov. 2000).

Cinara occidentalis (DAVIDSON)* (Fig. 3.)



Figs. 1–6. General aspects of some aphids. 1, Cinara confinis (oviparous female); 2, Cinara laricis (ditto); 3, Cinara occidentalis (ditto); 4, Aphis mimuli (apterous viviparous female); 5, Ericaphis scammelli (ditto); 6, Neotoxoptera formosana (ditto).

Abies procera (noble fir) from Oregon, USA (30. Sept. 1992; 30. Oct. 2001; 6. Nov. 2001).

Subfamily APHIDIDNAE Tribe Aphidini

Aphis armoraciae Cowen*

Cichorium intybus (redsalad) from USA (18. Nov. 2000).

Aphis hederae Kaltenbach

Hedera helix (ivy) from Italy (28. Feb. 2000; 12. Oct. 2000; 11. Dec. 2000; 4. Jan. 2001).

Aphis mimuli Oestlund* (Fig. 4.)

Intercepted on Nasturtium officinale (watercress) from USA (2. Aug. 2001).

Aphis nerii Boyer de Fonscolombe

Calotropics sp. from Hawaii (21. May 2001) and on Gomphocarrus sp. from Italy (2. Sep. 2000).

Tribe Macrosiphini

Acyrthosiphon lactucae (Passerini)*

Lactuca sativa (lettuce) from USA (9. Sep. 2001).

Amphorophora agathonica Hottes*

The fruit of *Rubus ideaus* (raspberry) fom USA (8, 6 & 10. Jan. 2001; 26 & 30. Jul. 2001; 6 & 26. Aug. 2001).

Bracycaudus schwartzi (BÖRNER)*

The fruit of Prunus divaricata (cherry plum) from Mexico (23. Mar. 2001).

Capitophorus elaeagni (DEL GUERCIO)

Cynara scolymus (artichoke) from France (21. Mar. 2001).

Chaetosiphon fragaefolii (Cockerell)

The fruit of *Fragaria annassa* (strawberry) from New Zealand (21. Dec. 1999; 26. Oct. 2000; 18 & 20. Nov. 2001; 19. Dec. 2001).

Ericaphis scammelli (MASON)* (Fig. 5.)

The fruit of *Vaccinium* sp. (blueberry) from Canada (16. Aug. 2001; 25. Jul. 2001) and USA (12, 18, 25. Jul. 2001; 1, 8. Aug. 2001).

Neotoxoptera formosana (TAKAHASHI) (Fig. 6.)

Allium ascalonicus (shallot) from Australia (22. Aug. 2000; 18. Oct. 2000).

Uroleucon cichorii (Koch)*

Cichorium intybus (redsalad) from Italy (24. Sep. 2000; 2. Feb. 2001).

Uroleucon sonchi (LINNAEUS)

Cichorium endiva (endive) from Tasmania (2. Mar. 2000)

Wahlgreniella nervata arbuti (DAVIDSON)*

Arbutus sp. from Italy (24. May 2001).

The identification of this aphid followed Heie (1994).

2. Miscellaneous Records

The following aphids are intercepted from the localities which have not been indicated in the past Japanese plant quarantine records. However, polyphagous and cosmopolitan

aphids such as *Aphis gossypii* GLOVER and *Myzus persicae* (SULZER) are excluded from the list, even if they have been detected from new localities.

Brachycaudus cardui (LINNAEUS)

Cynara scolymus (artichoke) from France (21. Mar. 2000), Italy (14. Apr. 2001) and Spain (21. Mar. 2001). Before 1994, this aphid had been found from only USA (SUGIMOTO and KITAGAWA, 1994).

Cavariella aegopodii (Scopoli)

Apium graveolens (celery) from China (18. Jun. 2001) and Korea (12. Jul. 2001). Before 1991, this aphid had been found from Belgium and USA (SUGIMOTO and KITAGAWA, 1991). **Dysaphis cynarae** (THEOBALD)?

Cynara scolymus (artichoke) from Australia (30. Jul. 2000; 20. Aug. 2000; 15. Apr. 2001; 1. Jul. 2001). Before 1991, this aphid had been found from only Belgium (Sugimoto and Kitagawa, 1991). According to Blackman and Eastop's (2000) identification guide, the specimens from Australia key out to *D. cynarae*, but this aphid is not recorded from Australia.

Dysaphis foeniculus (THEOBALD)

Foeniculum vulgare (fennel) from Australia (13. May 2000) and Italy (28. Feb. 2001). Before 1994, this aphid had been found from only USA (SUGIMOTO and KITAGAWA, 1994). Though SUGIMOTO and KITAGAWA (1994) reported that this aphid was not known to occur in Japan, we found the collection record of that from Japan in Chakrabarti and Medda's (1993) work (Ise, Mie Pref., –. v. 1961, on *Daucus carota*).

Nasonovia ribisnigri (MOSLEY)

In the last 3 years this aphid is often intercepted on *Cichorium endiva* (endive), *C. intybus* (chicory) and *Lactuca sativa* (lettuce) from California, USA. At least before 1991, it had never been found on these plants imported from USA, though a lot of lettuce had been imported from California in those days. Capinera (2001) reports that it has become a problem in California.

Rhopalosiphum latysiphon (Davidson)

This aphid is a little known species to Japanese quarantine records except that it is indicated in anonymous' (1984) list. Recently it is intercepted on the bulb of *Tulipa* from New Zealand (9. Sep. 1999) and on the root of *Taraxacum* sp. from France (17. May 2001).

Acknowledgments

We wish to express our sincere thanks to the quarantine staves of the Narira and Tokyo Sub-Stations for their cooperation of collecting aphids, and to Miss S. Allen of the Hobert Quarantine Center, Tasmania, for her kind correction of the English.

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和 文 摘 要 輸入植物から発見されたアブラムシ・追補 2

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主に東京港と成田空港における輸入検疫で発見され れまでの検疫記録にない国から発見された 6 種を紹 たアブラムシの最近のデータから、我が国の植物検疫 介した。 記録上初めて記録された17種を紹介した。また、こ