Contribution to our knowledge of the whitefly genus *Aleuroplatus* (Hemiptera: Aleyrodidae) in China

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Abstract: The *Aleuroplatus* species recorded in China are relatively few. Recently, a newly recorded species in this genus in China has been found: *Aleuroplatus lepidoformis*, collected on *Euonymus myrianthus* (Celastrales: Celastraceae) in the Qianjiangyuan National Park (Zhejiang, China). Detailed information on the taxonomy, distribution, host plants, and images of *Aleuroplatus* in China is provided. Some new hosts and distribution information are added, along with an identification key for *Aleuroplatus* species known to occur in China.

Key words: Aleyrodinae; key; taxonomy

中国扁粉虱属 *Aleuroplatus* 分类研究（半翅目：粉虱科）

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摘要：中国记录的扁粉虱属种类相对较少，本文记述中国该属 1 新记录种：鳞翅扁粉虱 *Aleuroplatus lepidoformis*，采自浙江省钱江源国家公园的大果卫矛（卫矛目：卫矛科）。本文详细介绍了中国扁粉虱属的分类、分布、寄主植物和形态特征图，增加了部分物种的新寄主和地理分布信息，并给出了中国扁粉虱属的分类检索表。

关键词：粉虱总科；检索表；分类

Introduction

Many species of whiteflies produce wax which surrounds their puparia, and the wax exhibits some variations in forms among species. In whitefly nymphs, wax can appear as a gelatinous mass, as plumes, as columns, or as setae-like projections (Byrne & Bellows 1991). The majority of wax colors are white or transparent, while a small number of species can produce wax in colors such as yellow, orange tints and blue-iridescent. However, few species of whiteflies are known to secrete black wax along the lateral margin. *Aleuroplatus lepidoformis* is covered with transparent gelatinous wax and has a waxy marginal fringe, similar to other species of this genus. However, in *A. lepidoformis*, its marginal wax contains a black substance, giving it the appearance of black wax. The original description was

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"anterior and posterior wax rays rather colourless, shorter than lateral black rays." However, we observed black wax on the anterior part of some individuals (Fig. 4B), speculating that this black substance, once fully-produced, will render the entire marginal wax to turn black.

The whitefly genus *Aleuroplatus* was erected by Quaintance & Baker (1914), with *Aleurodes quercusaquaticae* Quaintance 1900, as its type species by original designation. This genus includes 93 species worldwide (Manidurai *et al.* 2007; Martin & Mound 2007; Evans 2008; Dubey & David 2012a; Valencia & Evans 2024). To date, only 6 species are known to occur in China. Recently, *Aleuroplatus lepidoformis* was discovered for the first time on *Euonymus myrianthus* trees in the Qianjiangyuan National Park, Zhejiang, China. New distribution and host records of other species of this genus in China are also provided. A key to puparia of the China *Aleuroplatus* species is given.

Material and methods

The puparia were mounted following the method suggested by Dubey & David (2012b). The terminology for morphological structures follows Bink-Moenen (1983), Martin (1985), and Gill (1990). The habitus images were taken using a digital camera Nikon D500 with the Laowa 100 mm F2.8 Macro 2× lens. Puparial measurements and microphotographs were taken using a Zeiss scope A1 (Carl Zeiss, Gottingen, Germany) from Zhejiang Agriculture & Forestry University (ZAFU) and an Olympus BX63 imaging microscope (Olympus Corporation, Tokyo, Japan) from the Natural History Museum in London (NHMUK). These images were then concatenated into stacked images using the Helicon Focus software (Helicon Soft Ltd., Kharkiv, Ukraine). Adobe Photoshop was used to make small adjustments and to assemble the plates. The specimens are deposited in the Insect Collection of ZAFU. Some specimens of *Aleuroplatus* species collected from China which are deposited in the aleyrodid collection of NHMUK are also used for study. All data associated with the material examined is reproduced verbatim from the labels.

Taxonomy

Aleuroplatus Quaintance & Baker

Aleuroplatus Quaintance & Baker, 1914: 98. Type species: *Aleurodes quercusaquaticae* Quaintance 1900, by original designation.

Diagnosis. Pupal case usually flat, oval to subcircular in outline. Color varying from a transparent yellowish or whitish to black, but most species are dark brown or black. Many species variously dotted with darker markings. Margin crenate or dentate (Jesudasan & David 1991). Thoracic and caudal tracheal folds present, with several comb-shaped teeth at the opening of the tracheal fold on the lateral margin that are slightly differentiated from the teeth on the lateral margin in most species, from which the pencil-shaped wax that they secrete protrudes. Submarginal area not separated from dorsal disk, usually with some small pores. The longitudinal molting suture reaches the anterior margin of the body, while the transverse suture sometimes does not reach the lateral margin of the body. Vasiform orifice small, nearly circular or triangular, the inner margin rarely armed with teeth. Operculum almost filling vasiform orifice.

1. ***Aleuroplatus fici* Takahashi, 1932** (Figs 1A, 2A)

Aleuroplatus fici Takahashi, 1932: 31.

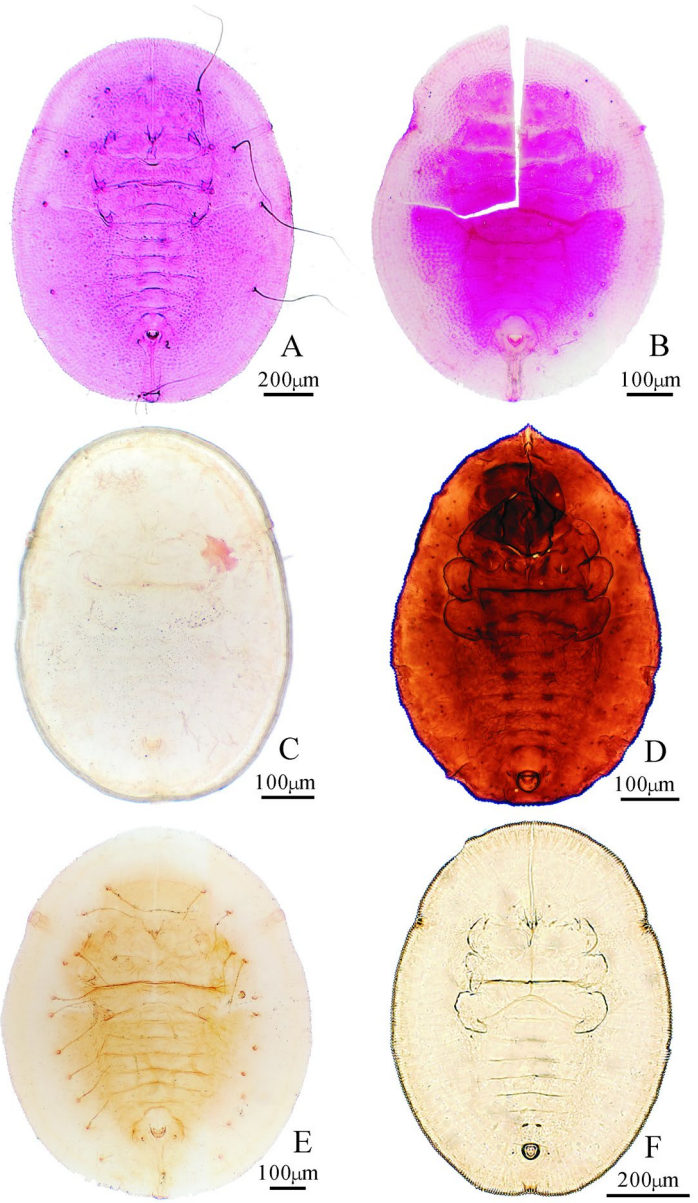

Figure 1. Puparia of *Aleuroplatus* species. A. *A. fici* Takahashi, 1932; B. *A. ficifolii* Takahashi, 1942; C. *A. liquidambaris* Takahashi, 1941; D. *A. pectiniferus* Quaintance & Baker, 1917; E. *A. spina* (Singh, 1931); F. *A. translucidus* Quaintance & Baker, 1917.

Specimens examined. 4 puparia on 3 slides, **China**, Hainan, Mt. Wuzhi, 18-V-2012, leg. Jirui WANG & Haiyan WU, on *Liquidambar formosana*, deposited in ZAFU; 2 puparia on 2 slides, **China**, Taiwan, Taipei, 18-VII-1968, leg. YC CHANG, on *Ficus* sp., deposited in

NHMUK (NHMUK 013476401; NHMUK 013476402); 11 puparia on 1 slide, **China**, Taiwan, Taipei, 01-II-1987, leg. CC KER, on *Ficus vasculosa*, deposited in NHMUK (NHMUK 013476400).

Host Plants. Moraceae: *Ficus retusa*, *F. microcarpa*, *F. swinhoei* (Evans 2008), *F. vasculosa*; Altingiaceae: *Liquidambar formosana* (new host record).

Remarks. Described from Taiwan by Takahashi (1932), syntypes from *Ficus retusa* in TARI (Taiwan Agricultural Research Institute). This species is similar to *A. ficusrugosae*, but can be distinguished by the presence of dorsum fine setae extending beyond the margin. We collected some specimens from Hainan Province on *Liquidambar formosana*.

Distribution. China (Hainan [new distribution record], Taiwan [Takahashi 1932]); Japan (Takahashi 1942).

2. ***Aleuroplatus ficifolii*** **Takahashi, 1942** (Figs 1B, 2B, 3)

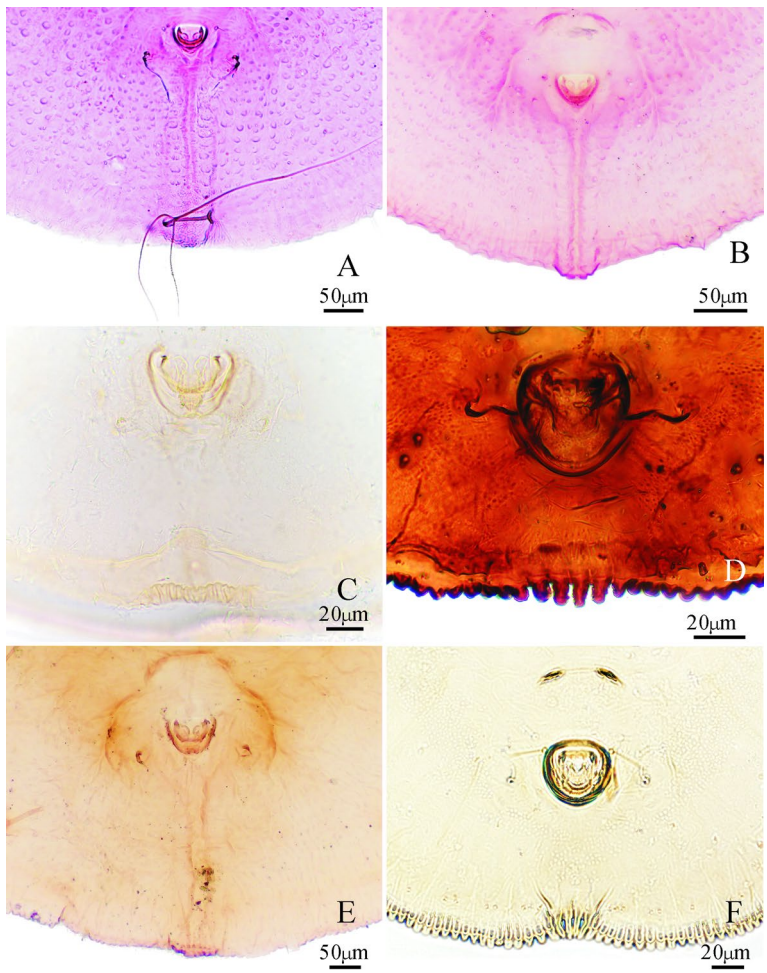

Figure 2. Vasiform orifice of *Aleuroplatus* species. A. *A. fici* Takahashi, 1932; B. *A. ficifolii* Takahashi, 1942; C. *A. liquidambaris* Takahashi, 1941; D. *A. pectiniferus* Quaintance &Baker,1917; E. *A. spina* (Singh, 1931); F. *A. translucidus* Quaintance & Baker, 1917.

Aleuroplatus ficifolii Takahashi, 1942: 174.

Aleuroplatus ficifolii var. *chiengsenensis* Takahashi, 1942: 174; synonymy by Mound & Halsey, 1978: 48.

Specimens examined. 5 puparia on 2 slides, **China**, Guangdong, South China National Botanical Garden, 25-VI-2024, leg. Qingsong LIN & Xiao ZHANG, on *Ficus microcarpa*; 6 puparia on 2 slides, **China**, Hainan, Qixianling Hot Spring National Forest Park, 29-VI-2024, leg. Qingsong LIN & Xiao ZHANG, on *Ficus altissima*; 20 puparia on 10 slides, **China**, Yunnan, Wuhu National Wetland Park, 24-VII-2023, leg. Qingsong LIN, Linqian LU & Xiao ZHANG, on *Ficus* sp.; 20 puparia on 10 slides, **China**, Yunnan, Meizihu Forest Park, 23-VII-2023, leg. Qingsong LIN, Linqian LU & Xiao ZHANG, on *Ficus* sp.; 20 puparia on 10 slides, **China**, Yunnan, Wuhu National Wetland Park, 24-VII-2023, leg. Qingsong LIN, Linqian LU & Xiao ZHANG, on *Ficus* sp.; 7 puparia on 4 slides, **China**, Yunnan, Xishuangbanna Tropical Botanical Garden of Chinese Academy of Sciences, 27-VII-2023, leg. Qingsong LIN, Linqian LU & Xiao ZHANG, on *Ficus benjamina*. All deposited in ZAFU.

Host Plants. Moraceae: *Ficus microcarpa*, *Ficus* sp. (Evans 2008); *F. benjamina*, *F. altissima* (new records).

Remarks. Recorded from Fujian (China) by Ko and Luo (1999), but this record was omitted in subsequent literature such as Evans (2008) and Yan & Bai (2017). Additionally, ecological and slide images of it are provided for the first time in this article. It is similar to *A. fici*, but can be distinguished by the shorter dorsal setae, more protruding tracheal combs, and larger pores on the dorsum. The size and shape of the pores in *A. ficifolii* exhibit some intraspecific variations. The submedian area of the mature puparium exhibits a bright yellow coloration. We found this species to be abundant on *Ficus* trees commonly used as roadside trees.

Distribution. China (Fujian [Ko & Luo 1999], Guangdong, Hainan, Yunnan [new distribution record]); Thailand (Takahashi 1942).

Figure 3. *Aleuroplatus ficifolii* Takahashi, 1942. A. *Paraleyrodes minei* (white wax nest) coexisting among *A. ficifolii*; B. Puparium; C. Puparia on hostplant *Ficus* leaves; D. Empty pupal case.

3. ***Aleuroplatus lepidoformis* David & David, 2010** (Figs 4, 5), new record to China

Aleuroplatus lepidoformis David *et al*., 2010: 8; Dubey & David, 2012b: 51.

Puparium. Yellowish-brown, oval, dorsum covered with transparent gelatinous wax and lateral margin has a black waxy marginal fringe, 0.84 mm long, 0.61 mm wide, broadest at the abdominal segment II (Fig. 4).

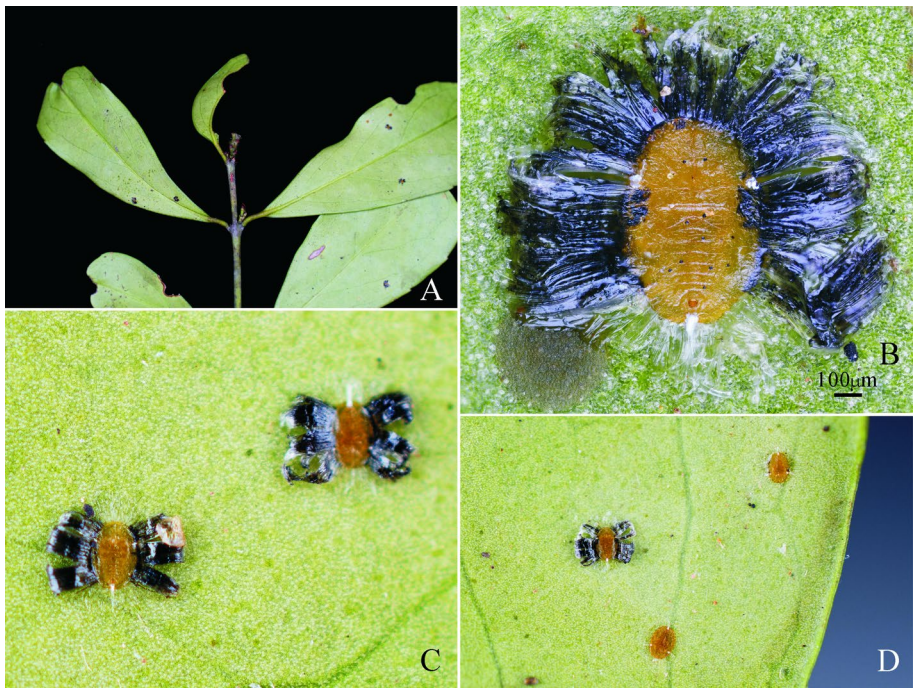

Figure 4. *Aleuroplatus lepidoformis* David & David, 2010. A. Puparia on host plant *Euonymus myrianthus* leaves; B. Puparia with an almost complete marginal wax; C. Puparia with wax on only two sides; D. Puparia without a waxy marginal fringe.

Margin. Finely toothed with 11–12 per 0.1 mm. Margin at tracheal pore area slightly indented (Fig. 5B).

Dorsum. A distinct row of submarginal pores present. Compound porettes scattered over dorsum. Longitudinal molting suture reaching the anterior margin. Transverse molting suture extending to the submargin (Fig. 5A). Thoracic tracheal folds distinct, tracheal opening with 3–4 teeth, subequal in size, very closely arranged, slightly smaller than other marginal teeth (Fig. 5B). Caudal comb similar to the thoracic ones (Fig. 5C). Median length of abdominal segment VII slightly shorter than that of VI. Cephalic setae 24.8 μm. First abdominal setae absent. Eighth abdominal setae 13.2 μm, their tuberculate bases located laterocephalad of vasiform orifice on the rim. Caudal furrow absent.

Vasiform orifice. Nearly circular, 47.0 μm long, 46.7 μm wide, with a prominent median tubercle near the hind end, space behind the orifice is 1–2 times its length; Operculum similar in shape, much smaller, and conceals the lingula, 27.4 μm long, 28.6 μm wide (Fig. 5C).

Venter. Thoracic and caudal tracheal folds distinct, with some small tubercles. Ventral abdominal setae 16.2 μm.

Specimens examined. 6 puparia on 4 slides, **China**, Zhejiang, Quzhou, Qianjiangyuan National Park, 29°14′46″N, 118°7′26″E, alt. 813 m, 10-I-2024, leg. Qingsong LIN, on *Euonymus myrianthus*, deposited in ZAFU.

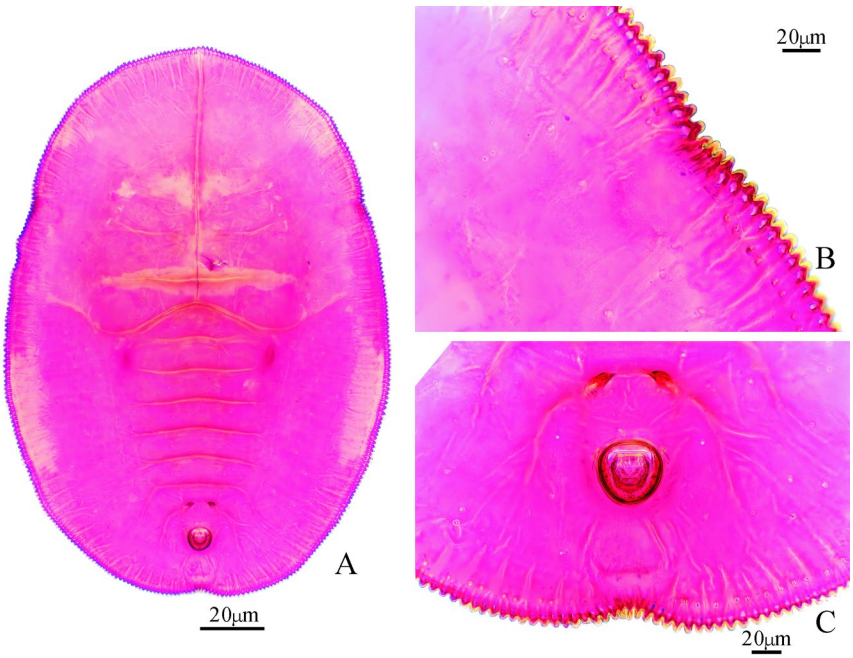

Figure 5. *Aleuroplatus lepidoformis* David & David, 2010. A. Dorsum of puparium; B. Lateral margin at tracheal opening; C. Vasiform orifice.

Host Plants. Celastraceae: *Euonymus myrianthus* (new host record).

Remarks. The puparia of this species are special among *Aleuroplatus* species in that they produce a black waxy marginal fringe (may be partially or completely absent). This species resembles *A. pileae* in the shape of body outline and thoracic combs with 3–4 teeth, but differs from it in color, being yellowish-brown, and by the presence of a prominent median tubercle near the hind end of vasiform orifice. Since its publication, this species has not been recorded. Our record is approximately 4,600 km away from its type locality, suggesting its potential continuous distribution in the Oriental region. However, detailed investigations on whiteflies have not been conducted in most areas yet. The original host was unidentified and our discovery contributes to its host information.

Distribution. China (Zhejiang [new distribution record]); India (David & David 2010).

4. ***Aleuroplatus liquidambaris*** **Takahashi, 1941** (Figs 1C, 2C)

Aleuroplatus liquidambaris Takahashi, 1941: 391.

Specimens examined. 6 puparia on 5 slides, **China**, Hainan, Mt. Wuzhi, 18-V-2012, leg. Jirui WANG & Haiyan WU, on *Liquidambar formosana*, deposited in ZAFU.

Host Plants. Hamamelidaceae: *Liquidambar* sp. (Evans 2008); *Liquidambar formosana* (new host record).

Remarks. Described from Hong Kong by Takahashi (1941), syntypes from *Liquidambar*

sp. in TARI. This species is similar to *A. fici*, but can be distinguished by the absence of long setae on the dorsum and the lack of tubercles on the thoracic tracheal folds. We collected some specimens from Hainan on *Liquidambar formosana*.

Distribution. China (Hainan [Zhu & Fu 2013], Hong Kong [Takahashi 1941]).

5. ***Aleuroplatus pectiniferus* Quaintance & Baker, 1917** (Figs 1D, 2D)

Aleuroplatus pectiniferus Quaintance & Baker, 1917: 393.

Aleuroplatus buchananiae Jesudasan & David, 1991: 282; synonymy by Martin, 1999: 48.

Aleuroplatus distinctus Jesudasan & David, 1991: 283; synonymy by Martin, 1999: 48.

Aleuroplatus ficusgibbosae Corbett, 1926: 271; synonymy by Martin, 1999: 48.

Aleuroplatus pectenserratus Singh, 1945: 76; synonymy by Martin, 1999: 48.

Aleuroplatus walayarensis Jesudasan & David, 1991: 285; by Martin, 1999: 48.

Specimens examined. 9 puparia on 3 slides, **China**, Zhejiang, Jiande, 20-IX-2021, leg. Qingsong LIN, on *Triadica sebifera*; 17 puparia on 10 slides, **China**, Zhejiang, Lin'an, 16-III-2016, leg. Jirui WANG, on *Morella rubra*. All deposited in ZAFU; 2 puparia on 2 slides, **China**, Taiwan, Yangmingshan, on *Schefflera taiwaniana*, 27-I-1994, leg. CC KO, deposited in NHMUK (NHMUK 013476489; NHMUK 013476491); 3 puparia on 1 slide, **China**, Hong Kong, Tai Tam Reservoir Road, on *Myrica rubra*, 06-XII-1999, leg. JH MARTIN, deposited in NHMUK (NHMUK 013519401).

Host Plants. Anacardiaceae: *Buchanania lanzan*; Betulaceae: *Alnus formosana*; Combretaceae: *Terminalia* sp.; Euphorbiaceae: *Bischofia javanica*, *Chrozophora obliqua*; Flacourtiaceae: *Casearia esculenta*; Lauraceae: *Cinnamomum* sp.; Malvaceae: *Urena lobata*; Moraceae: *Morus alba*, *Ficus gibbosa*, *Ficus capensis*, *F. vasculosa*; Myrtaceae: *Eugenia jambos*; Rutaceae: *Evodia* sp.; Salicaceae: *Salix warburgii*, *Salix* sp.; Theaceae: *Gordonia anomala* (Evans 2008).

Remarks. This species has a wide range of hosts and is widely distributed in East and South China. Additionally, it has numerous synonyms, indicating a certain level of morphological variation.

Distribution. China (Fujian, Guangdong, Hainan, Hong Kong, Jiangsu, Taiwan, Zhejiang); Australia; India; Iran; Java; Malaysia; Pakistan; Sri Lanka; Sulawesi (Evans 2008).

6. ***Aleuroplatus spina* (Singh, 1931)** (Figs 1E, 2E)

Dialeurodes spina Singh, 1931: 27.

Aleuroplatus spinus (Singh); Takahashi, 1952: 23; Mound & Halsey, 1978: 56; Martin & Mound, 2007: 17.

Pealius spinus (Singh); David & Subramaium, 1976: 209; Jesudasan and David, 1991: 322; Dubey and Sundararaj, 2005: 164.

Pealius spina (Singh); Dubey *et al*., 2004: 284.

Aleuroplatus spina (Singh); Martin & Mound, 2007: 17; David & Dubey, 2008: 350.

Specimens examined. 1 puparium on 1 slide, **China**, Taiwan, Taipei, on *Ficus religiosa*, 18-XI-1985, leg. CC KER, deposited in ZAFU; 1 puparium on 1 slide, **China**, Taiwan, Taipei, on *Ficus rumphii*, 18-XI-1985, leg. CC KER, deposited in NHMUK (NHMUK 013476692); 6 puparia on 1 slide, **China**, Macao, Taipa, on *Ficus rumphii*, 6-XII-2005, leg. JH MARTIN, deposited in NHMUK (NHMUK 013476589).

Host Plants. Moraceae: *Ficus arnotiana, F. bengalensis*, *F. religiosa* (Evans 2008); *F.*

rumphii (new host record).

Remarks. Described from India by Singh (1931), syntypes from *Ficus religiosa*. David & Subramaniam (1976) moved this species to the genus *Pealius* based on certain features such as medially shortened seventh abdominal segment and presence of submarginal setae. However, these features are also present in other species within the *Aleuroplatus*, such as *A. fici* and *A. ficifolii*. After examining the specimens from Taiwan, we follow the taxonomic classification proposed by Martin and Mound (2007) and place it within the genus *Aleuroplatus*.

Distribution. China (Fujian [Wang *et al*. 2018], Macao [new distribution record], Taiwan [Liang & Yeh 2001]); India; Malaysia; Singapore (Evans 2008).

7. ***Aleuroplatus translucidus* Quaintance & Baker, 1917** (Figs 1F, 2F)

Aleuroplatus translucidus Quaintance & Baker, 1917: 397.

Specimens examined. 16 puparia on 2 slides, **China**, Hong Kong, Victoria Peak, on undetermined plant, 03-III-1990, leg. JH MARTIN, deposited in NHMUK (JH Martin 5694) (NHMUK 013476613; NHMUK 013476614).

Host Plants. Rutaceae: *Liquidambar* sp., *Murraya* sp. (Evans 2008).

Remarks. Reported from Hong Kong by Martin & Lau (2011), voucher material in NHMUK collected on an undetermined shrub in The Peak, HK Island.

Distribution. China (Hong Kong [Martin & Lau 2011]); India; Iran; Pakistan (Evans 2008).

Key to the puparia of Chinese species of *Aleuroplatus*

1. Puparium black, outline oval ····· *A. pectiniferus*
-. Puparium yellowish or white, elliptical ····· 2
2. Dorsum with long setae reaching beyond the margin ····· 3
-. Dorsum setae short or absent ····· 4
3. Subdorsal with a ring of 12 pair of long setae ····· *A. spina*
-. 5 pairs of long setae, with 4 pairs on the subdorsal and 1 pair as caudal seta ····· *A. fici*
4. Waxy marginal fringe black, vasiform orifice with a prominent median tubercle near the hind end ····· *A. lepidoformis*
-. Waxy marginal fringe translucent, vasiform orifice without a prominent median tubercle near the hind end ····· 5
5. Tracheal combs protruding, large pores present on the dorsum ····· *A. ficifolii*
-. Tracheal combs not protruding, without prominent pores on the dorsum ····· 6
6. Operculum occupying two-thirds the orifice, lingula exposed ····· *A. liquidambaris*
-. Operculum nearly fills the orifice, lingula concealed ····· *A. translucidus*

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References

Bink-Moenen RM. 1983. Revision of the African whiteflies (Aleyrodidae). *Monografieën van de Nederlandse Entomologische Vereniging. Amsterdam*, 10: 1–211.

Byrne DN & Bellows TS. 1991. Whitefly biology. *Annual Review of Entomology*, 36(1): 431–457.

Corbett GH. 1926. Contribution towards our knowledge of the Aleyrodidae of Ceylon. *Bulletin of Entomological Research*, 16: 267–284.

David BV & Dubey AK. 2008. Aleyrodid (Hemiptera: Aleyrodidae) fauna of Sri Lanka with description of a new species. *Oriental Insects*, 42: 349–358.

David BV & Subramaniam TR. 1976. Studies on some Indian Aleyrodidae. *Records of Zoology Survey of India*, 70: 133–233.

David PMM, David BV & Dubey AK, 2010. Two new species and one new record of whiteflies (Hemiptera: Aleyrodidae) from India. *Hexapoda*, 17(1): 06–11.

Dubey AK & David BV. 2012a. Studies on the Indian species of *Aleuroplatus* (Hemiptera: Aleyrodidae), with designation of a neotype puparium for *Aleurodes alcocki* Peal. *Zootaxa*, 3303(1): 50–58.

Dubey AK & David BV. 2012b. Collection, preservation and preparation of specimens for taxonomic study of whiteflies (Hemiptera: Aleyrodidae). *In*: David BV (Ed.), *The Whiteflies or Mealywing Bugs: Biology, Host Specificity and Management*. Lambert Academic Publishing, Germany, pp. 1–19.

Dubey AK & Sundararaj R. 2005. A taxonomic study of the genus *Pealius* Quantance & Baker (Homoptera: Aleyrodidae) in India. *Journal of the Bombay Natural History Society*, 102(2): 162–165.

Dubey AK, Regu K & Sundararaj R. 2004. Aleyrodidae (Hemiptera: Aleyrodidae) fauna of the Lakshadweep, India. *Entomon*, 29(3): 279–286.

Evans GA. 2008. The whiteflies (Hemiptera: Aleyrodidae) of the world and their host plants and natural enemies. Available from: https://keys.lucidcentral.org/keys/v3/whitefly/PDF_PwP%20ETC/world-whitefly-catalog-Evans.pdf (updated 11 June 2007; cited 27 February 2024)

Gill RJ. 1990. The morphology of whiteflies. *In*: Gerling D (Ed.), *Whiteflies, their Bionomics, Pest Status and Management.* Intercept, Andover, pp. 13–46.

Jesudasan RWA & David BV. 1991 Taxonomic studies on Indian Aleyrodidae (Insecta: Homoptera). *Oriental Insects*, 25(1): 231–434.

Ko CC & Luo ZY. 1999. On some whiteflies (Homoptera: Aleyrodidae) from China. *Chinese Journal of Entomology*, 19: 19–25.

Liang SH & Yeh ML. 2001. A preliminary study on the occurrence of *Pealius spina* in Kaohsiung city. *Plant Protection Bulletin* (Taipei), 43(2): 51–56.

Manidurai P, David M & David BV. 2007. Descriptions of new species of whiteflies (Hemiptera: Aleyrodidae) from south India. *Oriental Insects*, 41(1): 391–426.

Martin JH. 1985. The whitefly of New Guinea (Homoptera: Aleyrodidae). *Bulletin of the British Museum* (*Natural History*) (*Entomology*), 50: 303–351.

Martin JH. 1999. The whitefly fauna of Australia (Sternorrhyncha: Aleyrodidae). A taxonomic account and identification guide. *Technical Paper, CSIRO Entomology, Canberra*, 38: 1–197.

Martin JH & Lau SK. 2011. The Hemiptera - Sternorrhyncha (Insecta) of Hong Kong, China - an annotated inventory citing voucher specimens and published records. *Zootaxa*, 2847: 1–122.

Martin JH & Mound LA. 2007. An annotated check list of the world's whiteflies (Insecta: Hemiptera: Aleyrodidae). *Zootaxa*, 1492: 84.

Mound LA & Halsey SH. 1978. *Whitefly of the World. A systematic catalog of the Aleyrodidae* (*Homoptera*) *with host plant and natural enemy data.* British Museum (Natural History)/John Wiley & Sons,

Chichester, 340 pp.

Quaintance AL & Baker AC. 1914. Classification of the Aleyrodidae Part II. *Technical Series*, *United States Department of Agriculture Bureau of Entomology*, 27: 95–109.

Quaintance AL & Baker AC. 1917. A contribution to our knowledge of the whiteflies of the sub-family Aleurodicinae (Aleyrodidae). *Proceedings of the U. S. National Museum*, 51: 335–445.

Singh K. 1931. A contribution towards our knowledge of the Aleyrodidae (whiteflies) of India. *Memoirs of the Department of Agriculture in India* (*Entomological Series*), 12: 1–98.

Singh K. 1945. Notes on Aleurodidae (Rhynchota) from India III. *Indian Journal of Entomology*, 6: 75–78.

Takahashi R. 1932. Aleyrodidae of Formosa, Part I. Report. *Department of Agriculture. Government Research Institute. Formosa*, 59: 1–57.

Takahashi R. 1941. Some foreign Aleyrodidae (Homoptera) IV. Species from Hong Kong. *Transactions of the Natural History Society of Formosa*, 31: 388–393.

Takahashi R. 1942. Some foreign Aleyrodidae (Homoptera) V. Species from Thailand and Indo-China. *Transactions of Natural History Society of Formosa*, 32: 168–175.

Takahashi R. 1952. Some Malayan species of Aleyrodidae (Homoptera). *Mushi*, 24: 21–27.

Valencia L & Evans GA. 2024. Review of the genus *Tetralicia* (Hemiptera: Aleyrodidae) and description of two new species of whiteflies found on avocado trees in Peru. *Zootaxa*, 5403(2): 197–238.

Wang JR, Du YZ, Martin JH & Xu ZH. 2018. Description of a new species of the whitefly genus *Pealius* Quaintance & Baker (Hemiptera: Aleyrodidae) from China. *Entomological Research*, 48(5): 348–353.

Yan FM & Bai RE. 2017. *Whitefly Fauna of China*. Henan Science and Technology Press, Zhengzhou, 74 pp.

Zhu WJ & Fu YG. 2013. The Aleyrodidae (Hemiptera, Sternorrhyncha) of Hainan Island, China. *Acta Zootaxonomica Sinica*, 38(3): 647–656.