

Supplementary Data

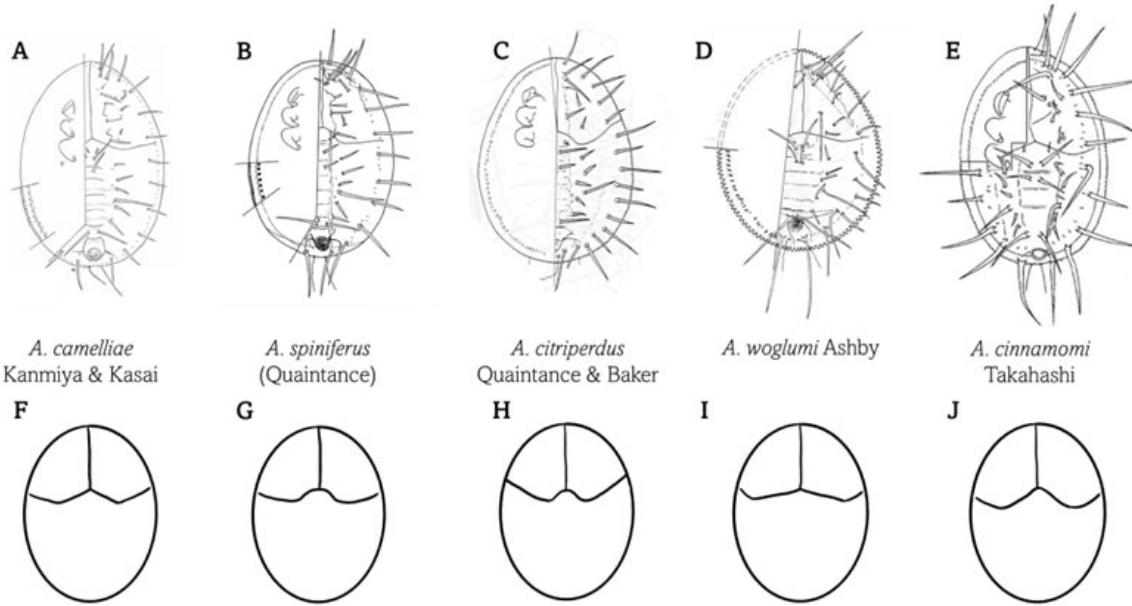


Figure S1. Variation of transverse molting suture of *Aleurocanthus* species. (A) Species illustration of Kanmiya & Kasai [1]; (B–D) Species illustration of Gillespie [2]; (E) Species illustration of Dubey & Ko [3]. (F–J) Simplification of molting suture pattern.

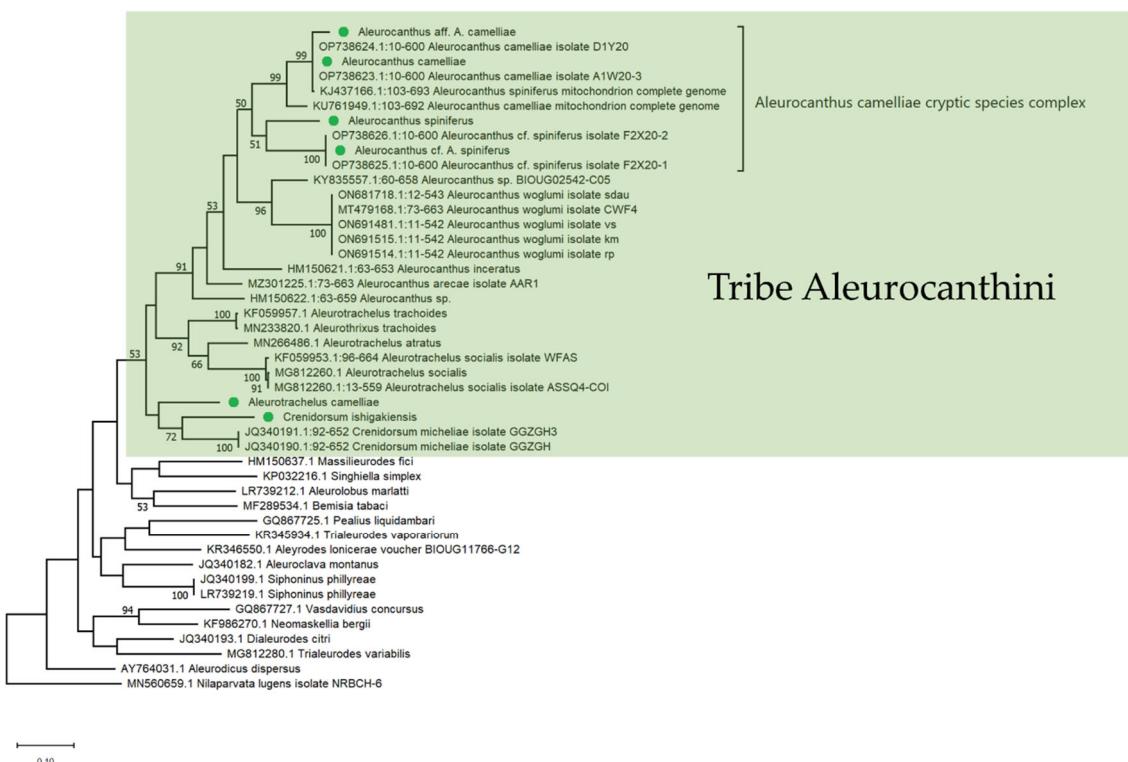


Figure S2. The ML phylogenetic tree of Tribe Aleurocanthini based on the mtCOI [4], using Tamuna & Nei model [5]. The bootstraps value less than 50% are hidden.

Table S1. MtCOI sequences from the GenBank database analyzed.

	Code	Identity
1	AB536792.1AS	AB536792.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Citrus-Toshima
2	AB536793.1AS	AB536793.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Citrus-Ashikita
3	AB536794.1AC	AB536794.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Uji
4	AB536796.1AC	AB536796.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Yagyuu
5	AB536797.1AC	AB536797.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Shigaraki
6	AB536798.1AC	AB536798.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Asamiya
7	AB536799.1AC	AB536799.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Toyonaka
8	AB536800.1AC	AB536800.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds isolate: Camellia-Daito
9	AB558172.1AS	AB615363.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds
10	AB615363.1AC	AB615364.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds
11	AB615364.1AS	AB786712.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: B2 haplotype: B2
12	AB786712.1AC	AB786713.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: B3 haplotype: B3-1
13	AB786713.1AC	AB786714.1 <i>Aleurocanthus camelliae</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: B3 haplotype: B3-2
14	AB786714.1AC	AB786715.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A1 haplotype: A1-2
15	AB786715.1AS2	AB786716.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A1 haplotype: A1-3
16	AB786716.1AS	AB786717.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A1 haplotype: A1-4
17	AB786718.1AS	AB786718.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-1
18	AB786719.1AS	AB786719.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-2
19	AB786720.1AS	AB786720.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-3
20	AB786721.1AS	AB786721.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-4
21	AB786722.1AS	AB786722.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-5
22	AB786723.1AS	AB786723.1 <i>Aleurocanthus spiniferus</i> mitochondrial COI gene for cytochrome oxidase subunit I partial cds haplogroup: A2 haplotype: A2-6
23	JX281760.1AW	JX281760.1 <i>Aleurocanthus woglumi</i> cytochrome oxidase subunit I (co1) gene partial cds mitochondrial
24	LC088497.1AC	LC088497.1 <i>Aleurocanthus camelliae</i> mitochondrial COX1 gene for cytochrome c oxidase subunit 1 partial cds haplotype: HaplB1
25	MH700443.1AS	MH700443.1 <i>Aleurocanthus spiniferus</i> haplotype H1 cytochrome oxidase subunit I (COI) gene partial cds mitochondrial
26	MH700444.1AS	MH700444.1 <i>Aleurocanthus spiniferus</i> haplotype H2 cytochrome oxidase subunit I (COI) gene partial cds mitochondrial
27	MH700445.1AS	MH700445.1 <i>Aleurocanthus spiniferus</i> haplotype H3 cytochrome oxidase subunit I (COI) gene partial cds mitochondrial
28	MH700446.1AS	MH700446.1 <i>Aleurocanthus spiniferus</i> haplotype H4 cytochrome oxidase subunit I (COI) gene partial cds mitochondrial
29	MN662884.1AS	MN662884.1 <i>Aleurocanthus spiniferus</i> isolate ASPI PE1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
30	MN662885.1AS	MN662885.1 <i>Aleurocanthus spiniferus</i> isolate ASPI PE2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
31	MN662886.1AS	MN662886.1 <i>Aleurocanthus spiniferus</i> isolate ASPI PE3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial

32	MN662887.1AS	MN662887.1 <i>Aleurocanthus spiniferus</i> isolate ASPI PE4 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
33	MN662888.1AS	MN662888.1 <i>Aleurocanthus spiniferus</i> isolate ASPI R1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
34	MN662889.1AS	MN662889.1 <i>Aleurocanthus spiniferus</i> isolate ASPI R2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
35	MN662890.1AS	MN662890.1 <i>Aleurocanthus spiniferus</i> isolate ASPI C2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
36	MN662891.1AS	MN662891.1 <i>Aleurocanthus spiniferus</i> isolate ASPI C3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
37	MN662892.1AS	MN662892.1 <i>Aleurocanthus spiniferus</i> isolate ASPI C4 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
38	MN662893.1AS	MN662893.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
39	MN662894.1AS	MN662894.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
40	MN662895.1AS	MN662895.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
41	MN662896.1AS	MN662896.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG4 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
42	MN662897.1AS	MN662897.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG5 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
43	MN662898.1AS	MN662898.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG6 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
44	MN662899.1AS	MN662899.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG7 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
45	MN662900.1AS	MN662900.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG8 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
46	MN662901.1AS	MN662901.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG9 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
47	MN662902.1AS	MN662902.1 <i>Aleurocanthus spiniferus</i> isolate ASPI SG10 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
48	MN662903.1AS	MN662903.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
49	MN662904.1AS	MN662904.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
50	MN662905.1AS	MN662905.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S4 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
51	MN662906.1AS	MN662906.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S5 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
52	MN662907.1AS	MN662907.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S6 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
53	MN662908.1AS	MN662908.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S7 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
54	MN662909.1AS	MN662909.1 <i>Aleurocanthus spiniferus</i> isolate ASPI B3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
55	MN662910.1AS	MN662910.1 <i>Aleurocanthus spiniferus</i> isolate ASPI B4 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
56	MN662911.1AS	MN662911.1 <i>Aleurocanthus spiniferus</i> isolate ASPI B5 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
57	MN662912.1AS	MN662912.1 <i>Aleurocanthus spiniferus</i> isolate ASPI A1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
58	MN662913.1AS	MN662913.1 <i>Aleurocanthus spiniferus</i> isolate ASPI A2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
59	MN662914.1AS	MN662914.1 <i>Aleurocanthus spiniferus</i> isolate ASPI A3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
60	MN662915.1AS	MN662915.1 <i>Aleurocanthus spiniferus</i> isolate ASPI A5 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
61	MN662916.1AS	MN662916.1 <i>Aleurocanthus spiniferus</i> isolate ASPI C1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
62	MN662917.1AS	MN662917.1 <i>Aleurocanthus spiniferus</i> isolate ASPI M1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
63	MN662918.1AS	MN662918.1 <i>Aleurocanthus spiniferus</i> isolate ASPI M2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
64	MN662919.1AS	MN662919.1 <i>Aleurocanthus spiniferus</i> isolate ASPI M3 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial

65	MN662920.1AS	MN662920.1 <i>Aleurocanthus spiniferus</i> isolate ASPI P1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
66	MN662921.1AS	MN662921.1 <i>Aleurocanthus spiniferus</i> isolate ASPI P2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
67	MN662922.1AS	MN662922.1 <i>Aleurocanthus spiniferus</i> isolate ASPI S1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
68	MN662923.1AS	MN662923.1 <i>Aleurocanthus spiniferus</i> isolate ASPI B1 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
69	MN662924.1 AS	MN662924.1 <i>Aleurocanthus spiniferus</i> isolate ASPI B2 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
70	MN662925.1AS	MN662925.1 <i>Aleurocanthus spiniferus</i> isolate ASPI PE5 cytochrome c oxidase subunit I (COI) gene partial cds mitochondrial
71	OP323039.1AC	OP323039.1 <i>Aleurocanthus camelliae</i> isolate A1V10 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
72	OP323040.1AC	OP323040.1 <i>Aleurocanthus camelliae</i> isolate A1V11 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
73	OP323041.1AC	OP323041.1 <i>Aleurocanthus camelliae</i> isolate A1V17 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
74	OP323042.1AC	OP323042.1 <i>Aleurocanthus camelliae</i> isolate A1V18 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
75	OP323043.1AC	OP323043.1 <i>Aleurocanthus camelliae</i> isolate A1V19 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
76	OP323044.1AC	OP323044.1 <i>Aleurocanthus camelliae</i> isolate A1V20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
77	OP323045.1AC	OP323045.1 <i>Aleurocanthus camelliae</i> isolate A1W20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
78	OP323046.1AC	OP323046.1 <i>Aleurocanthus camelliae</i> isolate A1X21 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
79	OP323047.1AC	OP323047.1 <i>Aleurocanthus camelliae</i> isolate A1Y20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
80	OP323048.1AC	OP323048.1 <i>Aleurocanthus camelliae</i> isolate B1V09 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
81	OP323049.1AC	OP323049.1 <i>Aleurocanthus camelliae</i> isolate B1V20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
82	OP323050.1AC	OP323050.1 <i>Aleurocanthus camelliae</i> isolate C1V11 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
83	OP323051.1AC	OP323051.1 <i>Aleurocanthus camelliae</i> isolate D1Y20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
84	OP323052.1AC	OP323052.1 <i>Aleurocanthus camelliae</i> isolate E1V09 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
85	OP323053.1AC	OP323053.1 <i>Aleurocanthus camelliae</i> isolate E1V20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
86	OP323054.1AC	OP323054.1 <i>Aleurocanthus camelliae</i> isolate F1W22 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
87	OP323055.1AS	OP323055.1 <i>Aleurocanthus spiniferus</i> isolate A2Z22 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
88	OP323056.1AS	OP323056.1 <i>Aleurocanthus spiniferus</i> isolate A2Z20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial
89	OP323057.1ASC	OP323057.1 <i>Aleurocanthus spiniferus</i> isolate F2X20 cytochrome c oxidase subunit I (COX1) gene partial cds mitochondrial

Table S2. Morphological comparison of the putative tribal characters of whiteflies.

Tribe	Genus	Morphological characters of pupal case (Characters number in Manzari & Quicke, 2006)					Length of seventh abdominal segment reduced medially (58)	Abdominal rachis (61)	Position of antenna relative to the prothoracic legs (94)
		Pupal case margin (1)	Vasiform orifice shape (34)	Vasiform orifice (37)	Caudal furrow (55)				
Aleurocanthini Takahashi	Acaudaleyrodes	Distinctly toothed	Oval	Elevated	Absent	Not significantly	Present	Mesal	
	Aleurocanthus	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Aleurotrachelus	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Aleurothrixus	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Aleuroplatus	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Crenidorsum	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Tetraleurodes	Distinctly toothed	Subcordate	Elevated	Absent	Not significantly	Present	Mesal	
	Aleurochitonini Sampson	Aleurochiton	Distinctly toothed	Nearly tetrahedral	Not elevated	Present	Not significantly	Absent	Mesal
Aleyrodini Sampson	Aleyrodes	Undulated and/or indistinctly indentate	Nearly triangular	Not elevated	Present	Not significantly	Present	Mesal	
Aleurolobini Takahashi	Aleurolobus								
Bemisini David	Bemisia	Undulated and/or indistinctly indentate	Nearly triangular	Not elevated	Present	Not significantly	Absent	Mesal	
Dialeurodini Sampson	Dialeurodes								
Li-paleyrodini David	Li-paleyrodes	Undulated and/or indistinctly indentate	Nearly triangular	Not elevated	Present	Not significantly	Absent	Mesal	
Neomaskellini Sampson	Neomaskellia								
Siphoninini Sampson	Siphoninus	Undulated and/or indistinctly indentate	Subcordate	Not elevated	Present	Significantly	Absent	Lateral	
Trialeurodini	Trialeurodes								
Zaphanerini David	Zaphanera	Distinctly toothed	Nearly triangular	Not elevated	Absent	Significantly	Absent	Lateral	
			Subcordate	Elevated	Absent	Not significantly	Present	Mesal	

References

1. Kanmiya, K.; Ueda, S.; Kasai, A.; Yamashita, K.; Sato, Y.; Yoshiyasu, Y. Proposal of New Specific Status for Tea-Infesting Populations of the Nominal Citrus Spiny Whitefly *Aleurocanthus spiniferus* (Homoptera: Aleyrodidae). *Zootaxa* **2011**, 2797, 25–44.
2. Gillespie, P.S. Article A Review of the Whitefly Genus Aleurocanthus Quaintance & Baker (Hemiptera: Aleyrodidae) in Australia. *Zootaxa* **2012**, 3252, 1–42.
3. Dubey, A.K.; Ko, C.C. Sexual Dimorphism among Species of Aleurocanthus Quaintance & Baker (Hemiptera: Aleyrodidae) in Taiwan, with One New Species and an Identification Key. *Zootaxa* **2012**, 1–23, doi:10.11646/zootaxa.3177.1.1.
4. Folmer, O.F.; Black, M.B.; Hoeh, W.R.; Lutz, R. v.; Vrijenhoek, R.C. DNA Primers for Amplification of Mitochondrial Cytochrome c Oxidase Subunit I from Diverse Metazoan Invertebrates. *Mol Mar Biol Biotechnol* **1994**, 3 5, 294–299.
5. Tamura, K.; Nei, M. Estimation of the Number of Nucleotide Substitutions in the Control Region of Mitochondrial DNA in Humans and Chimpanzees. *Mol Biol Evol* **1993**, 10, 512–526, doi:10.1093/oxfordjournals.molbev.a040023.