

附录2 千岛湖18个研究岛屿上的蚜虫物种名录及DNA条形码比对结果

Appendix 2 The list of aphids in the 18 studied islands of the Thousand Island Lake, China and the results of DNA barcoding

编号 Serial number	属 Genus	物种 Species	GenBank上传序 列号 GenBank accession numbers	DNA条形码技术比对结果 The results of DNA barcoding		
				NCBI中最相近序列 The most similar sequence in NCBI	物种 Species	相似度 Similarity (%)
1	<i>Aleurosiphon</i>	<i>Aleurosiphon smilacifoliae</i>	OR091375	MH821441.1	<i>Aleurosiphon smilacifoliae</i>	99.29–100
2	<i>Aphis</i>	<i>Aphis aurantii</i>	OR091477	JQ916146.1	<i>Aphis aurantii</i>	99.09–100
3	<i>Aphis</i>	<i>Aphis celastrii</i>	OR091476	MH821852.1	<i>Aphis celastrii</i>	99.84–100
4	<i>Aphis</i>	<i>Aphis eugeniae</i>	–	–	–	–
5	<i>Aphis</i>	<i>Aphis gossypii</i>	OR098297	MN320356.1	<i>Aphis gossypii</i>	99.85–100
6	<i>Aphis</i>	<i>Aphis odinae</i>	OR091475	JQ916184.1	<i>Aphis odinae</i>	99.54–100
7	<i>Aphis</i>	<i>Aphis</i> sp.1	OR098298	JN644996.1	<i>Mollitrichosiphum tenuicorpus</i>	99.24–100
8	<i>Aphis</i>	<i>Aphis spiraecola</i>	OR091484	JX844372.1	<i>Aphis spiraecola</i>	100
9	<i>Aulacophoroides</i>	<i>Aulacophoroides formosana</i>	OR098300	MH821885.1	<i>Aphidinae</i> sp. HLshujia514	99.82–100
10	<i>Aulacophoroides</i>	<i>Aulacophoroides hoffmanni</i>	OR098299	KR040915.1	<i>Nasonovia castelleiae</i>	94.83
11	<i>Brachycaudus</i>	<i>Brachycaudus helichrysi</i>	OR094232	KC286672.1	<i>Brachycaudus helichrysi</i>	100
12	<i>Ceratovacuna</i>	<i>Ceratovacuna lanigera</i>	OR094236	JX282739.1	<i>Ceratovacuna lanigera</i>	100
13	<i>Chuansicallis</i>	<i>Chuansicallis chengtuensis</i>	OR094237	MH821706.1	<i>Chuansicallis chengtuensis</i>	99.10–99.28

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				NCBI中最相近序列 The most similar sequence in NCBI	物种 Species	相似度 Similarity (%)
14	<i>Eutrichosiphum</i>	<i>Eutrichosiphum manipurensense</i>	OR094238	JQ926042.1	<i>Eutrichosiphum manipurensense</i>	99.85–100
15	<i>Eutrichosiphum</i>	<i>Eutrichosiphum pasaniae</i>	OR094242	JQ926144.1	<i>Eutrichosiphum pasaniae</i>	99.54–100
16	<i>Greenidea</i>	<i>Greenidea kuwanai</i>	OR094246	JQ925950.1	<i>Greenidea kuwanai</i>	100
17	<i>Metanipponaphis</i>	<i>Metanipponaphis lithocarpicola</i>	OR094245	JX489637.1	<i>Metanipponaphis lithocarpicola</i>	99.54
18	<i>Micromyzodium</i>	<i>Micromyzodium kuwakusae</i>	OR094254	MH820510.1	<i>Micromyzodium kuwakusae</i>	100
19	<i>Mollitrichosiphum</i>	<i>Mollitrichosiphum nigrofasciatum</i>	OR094253	MT556472.1	<i>Mollitrichosiphum nigrofasciatum</i>	100
20	<i>Sitobion</i>	<i>Sitobion smilacifoliae</i>	OR098301	KR045188.1	<i>Sitobion avenae</i>	95.59–97.07
21	<i>Takecallis</i>	<i>Takecallis taiwana</i>	OR094448	KF639651.1	<i>Takecallis taiwana</i>	100
22	<i>Tuberculatus</i>	<i>Tuberculatus indicus</i>	OR094452	KY307180.1	<i>Tuberculatus indicus</i>	99.24–100
23	<i>Tuberculatus</i>	<i>Tuberculatus radisectuae</i>	OR094451	KY307180.1	<i>Tuberculatus indicus</i>	95.74–96.20
24	<i>Tuberculatus</i>	<i>Tuberculatus yokoyamai</i>	OR094464	KY307291.1	<i>Tuberculatus yokoyamai</i>	98.63

本研究主要以形态学鉴定结果来划分蚜虫种类, DNA条形码技术鉴定结果仅作为辅助。其中*Aphis eugeniae*实际采集数量较少, 故仅做形态学鉴定, 未做DNA比对。In this study, the aphid species were divided mainly by morphological identification, and the DNA barcoding results were only used as auxiliary. Among them, the actual collection amount of *Aphis eugeniae* was small, so only morphological identification was done, and DNA comparison was not done.