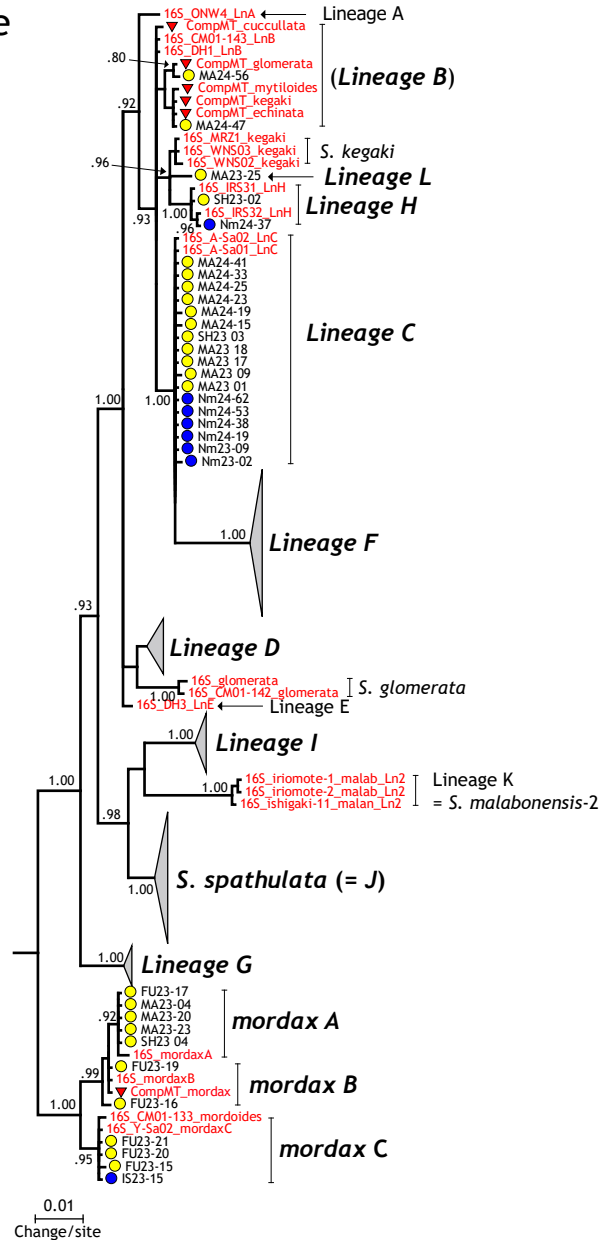


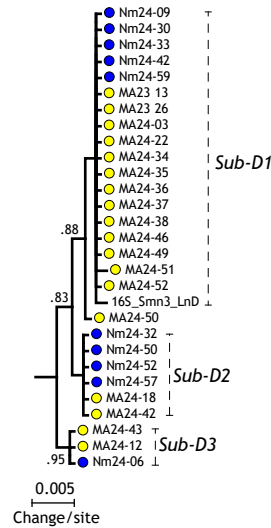
Supplementary Material 6. Single-gene BI trees

The *mordax* group was used as the outgroup. Lineages identified in the present study are indicated by bold, enlarged, and italicized names. Node credibility values are given for nodes with posterior probability ≥ 0.80 . In the BI-16S tree, the cluster corresponding to Lineages B (shown in parentheses) was identified by cross-referencing clustering patterns in *COX1* trees (NJ and BI) and NJ-16S tree (see Supplementary Material 7 for NJ trees). Because no reference sequence was available for Lineage D in the *COX1* gene, clustering patterns in 16S trees (NJ and BI) were used to assign this lineage in *COX1* trees. Similarly, Lineages B, D, and the three *mordax* lineages lacked reference sequences in the *COX3* and *NAD3* trees. Clustering patterns in 16S and/or *COX1* trees were therefore used to identify these lineages in each gene tree. Sublineages (within Lineages C, D, and *S. spathulata*) were defined based on concatenated sequences (see main text). When clusters corresponding to these sublineage were detected in gene-specific trees, the respective sublineage names were assigned to those clusters.

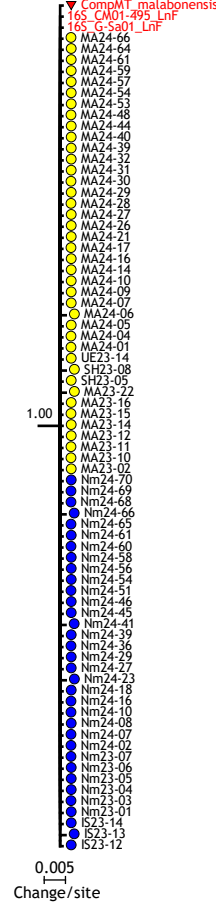
BI-16S tree



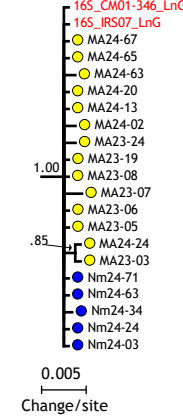
Lineage D



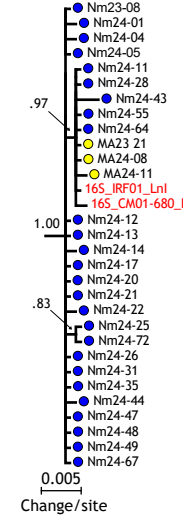
Lineage F



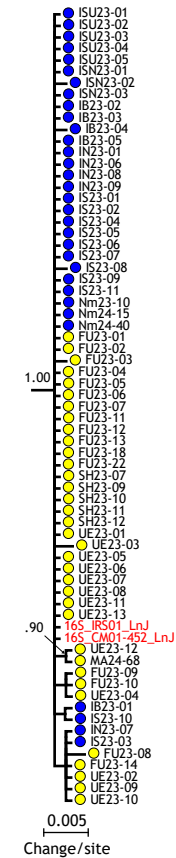
Lineage G



Lineage I

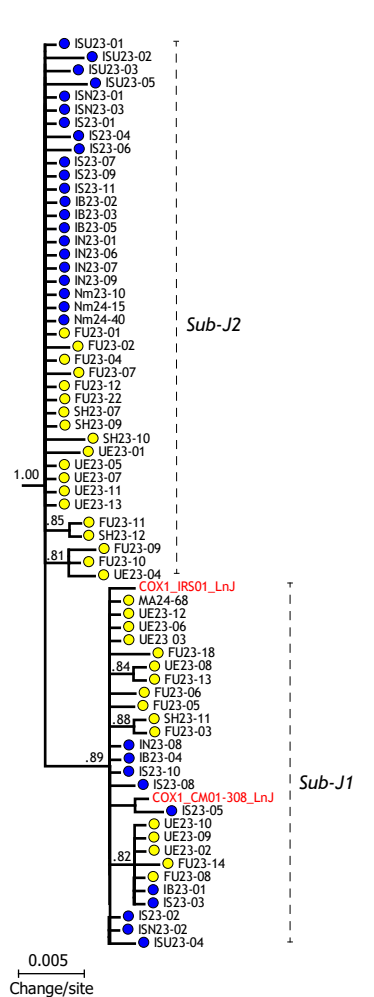
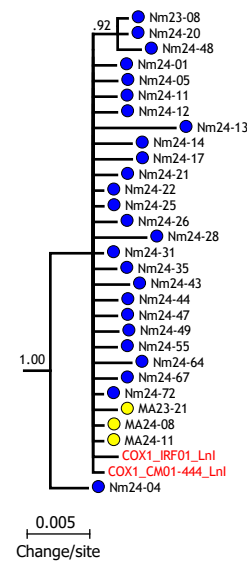
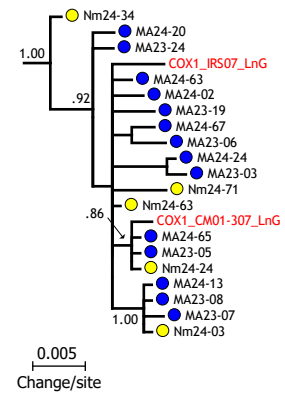
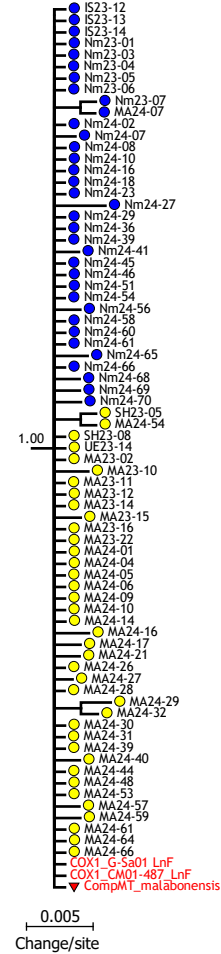
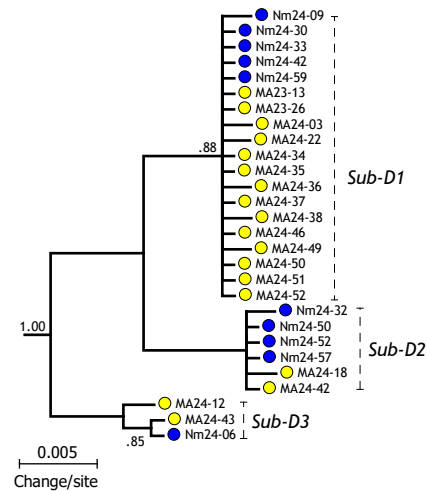
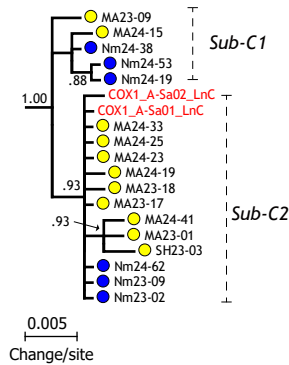
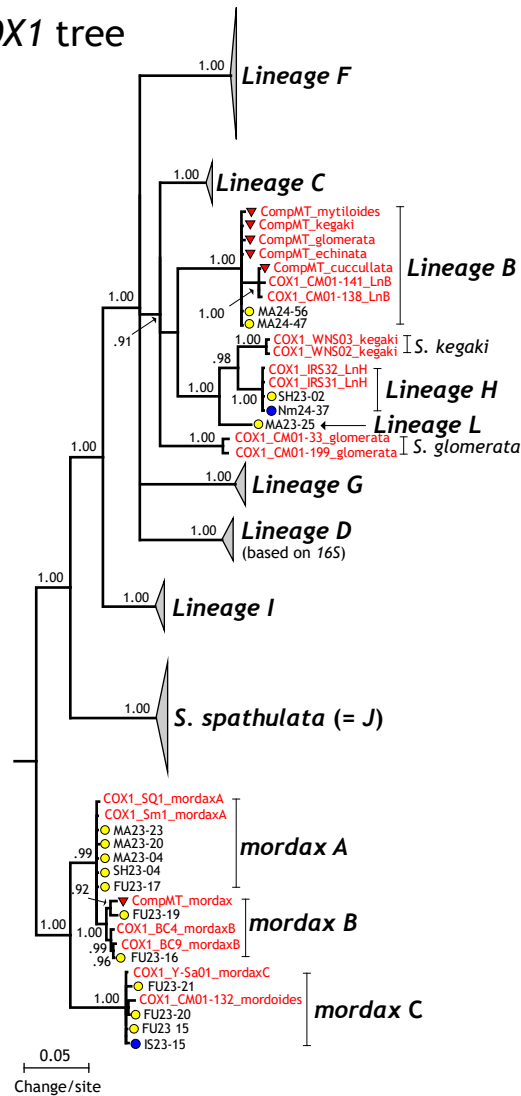


S. spathulata



● Ishigaki
● Iriomote
▼ Mitogenome-derived
Sequence name in red (no symbol): reference sequence with known lineage

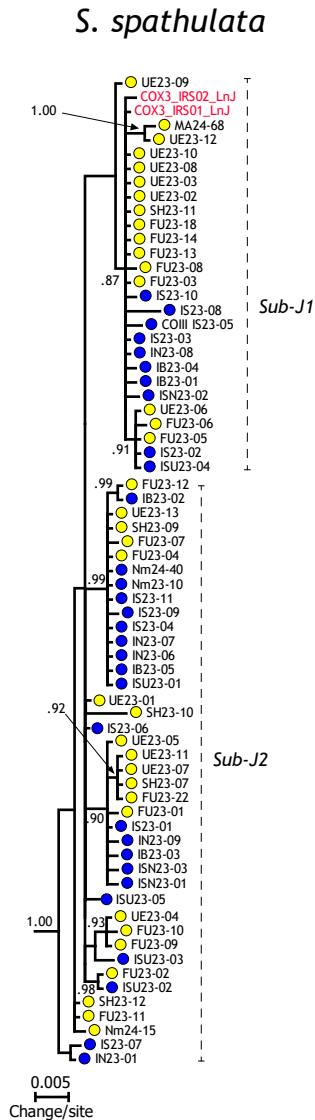
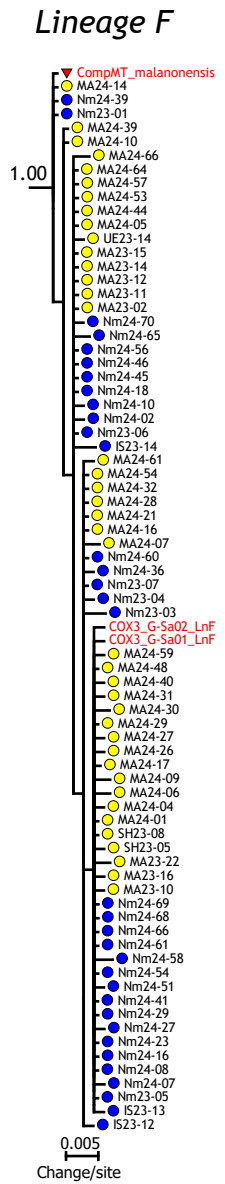
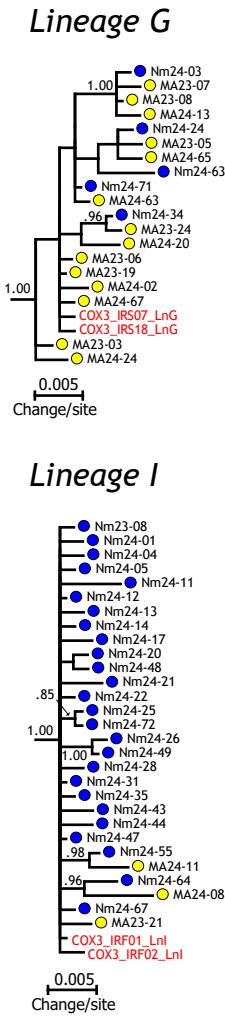
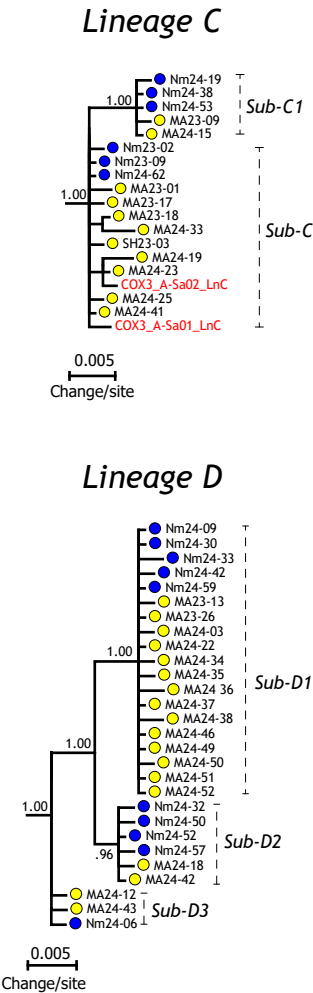
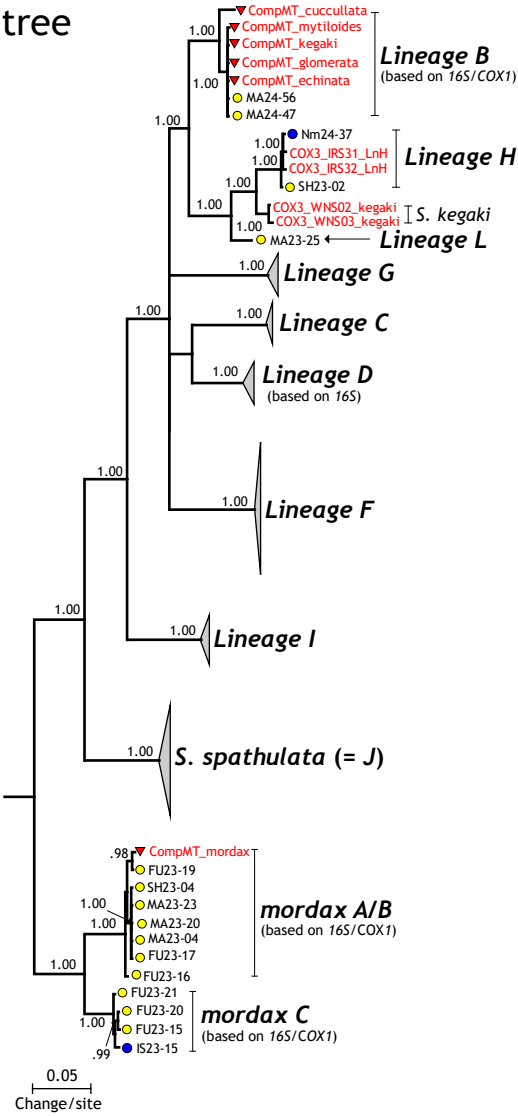
BI-*COX1* tree



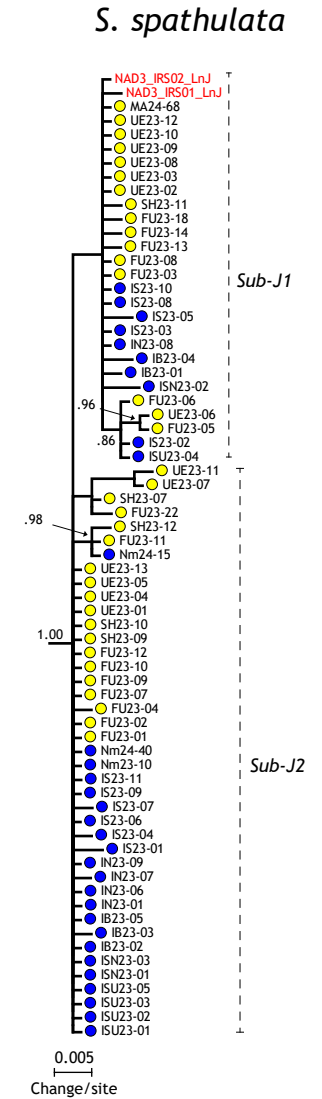
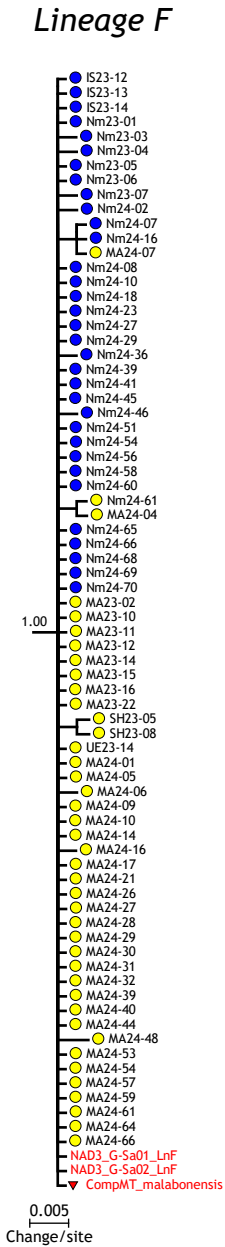
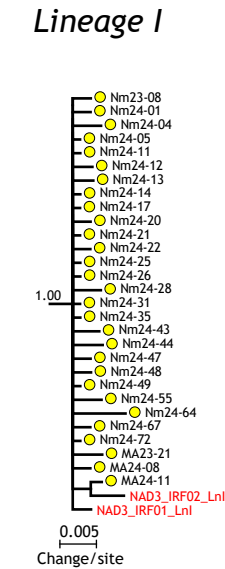
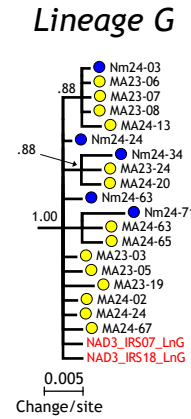
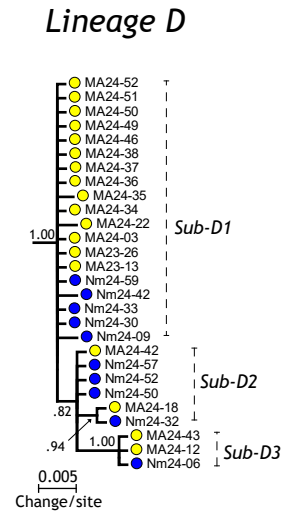
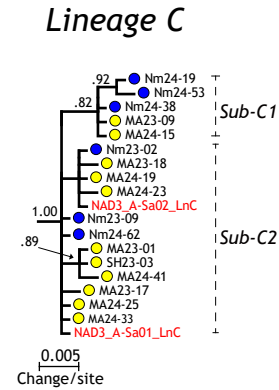
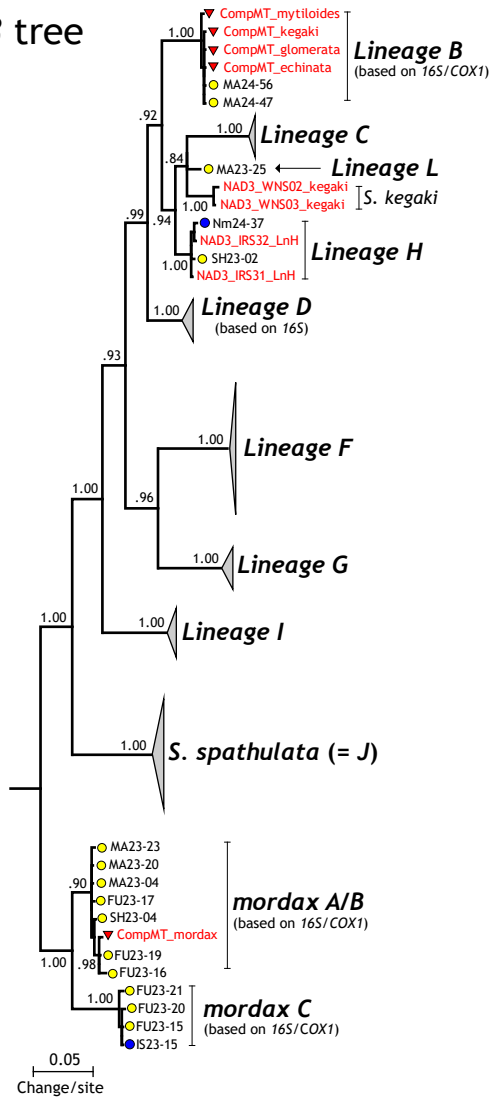
- Ishigaki
- Iriomote
- ▼ Mitogenome-derived

Sequence name in red (no symbol): reference sequence with known lineage

BI-COX3 tree



● Ishigaki
● Iriomote
▼ Mitogenome-derived
Sequence name in red (no symbol): reference sequence with known lineage

BI-*NAD3* tree

- Ishigaki
- Iriomote
- Mitogenome-derived

Sequence name in red (no symbol): reference sequence with known lineage