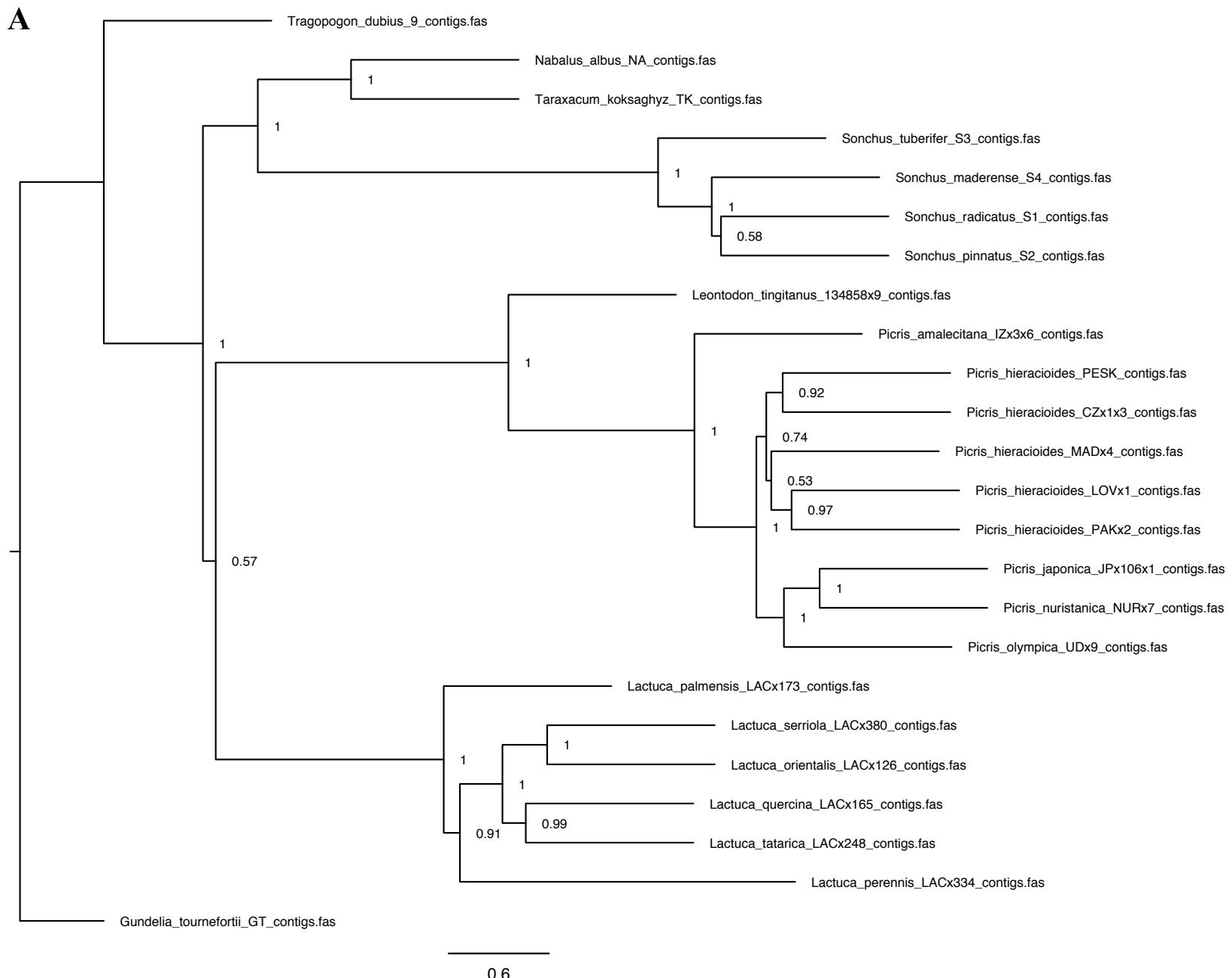**Appendix S13.** ASTRAL species tree and RAxML-NG tree with partitioning based on the Tribe-exon-shrunken data set and ASTRAL species tree of the tribe-supercontig-complete data set. (A) ASTRAL tree of the tribe-exon-shrunken data set. (B) RAxML analyses (with partitioning and substitution models) of the tribe-exon-shrunken data set. (C) ASTRAL tree of the tribe-supercontig data set. Scale bars indicate the expected number of nucleotide substitutions per site. In the ASTRAL trees, the numbers on nodes indicate posterior probability values and on the ML trees the numbers indicate percentage bootstrap support.

B

C

Tragopogon-dubius_9

Taraxacum-kokxsaghyz_ACTTGA

Nabalus-albus_S15

1

1

Sonchus-tuberifer_S3

sonchus_maderense_S4_shm_12

Sonchus-pinnatus_S2

Sonchus-radicatus_S1

1

1

1

1

Lactuca-perennis_LACx334

Lactuca-palmensis_LACx173

Lactuca-tatarica_LACx248

Lactuca-quercina_LACx165

Lactuca-serriola_LACx380

orientalis_cos

0.4

1

1

1

1

0.55

Leontodon-tingitanus_134858

Picris-hieracioides_PESK

Picris-hieracioides_CZx1x3

Picris-olympica_UDx9

Picris-hieracioides_PAKx2

Picris-hieracioides_LOVx1

Picris-hieracioides_MADx4

Picris-japonica_JPx106x1

Picris-nuristanica_NURx7

Picris-amalecitana_IZx3x6

1

1

1

0.81

1

0.39

0.67

1

1

Gundelia-tournefortii_S4

2.0