



## Supplement

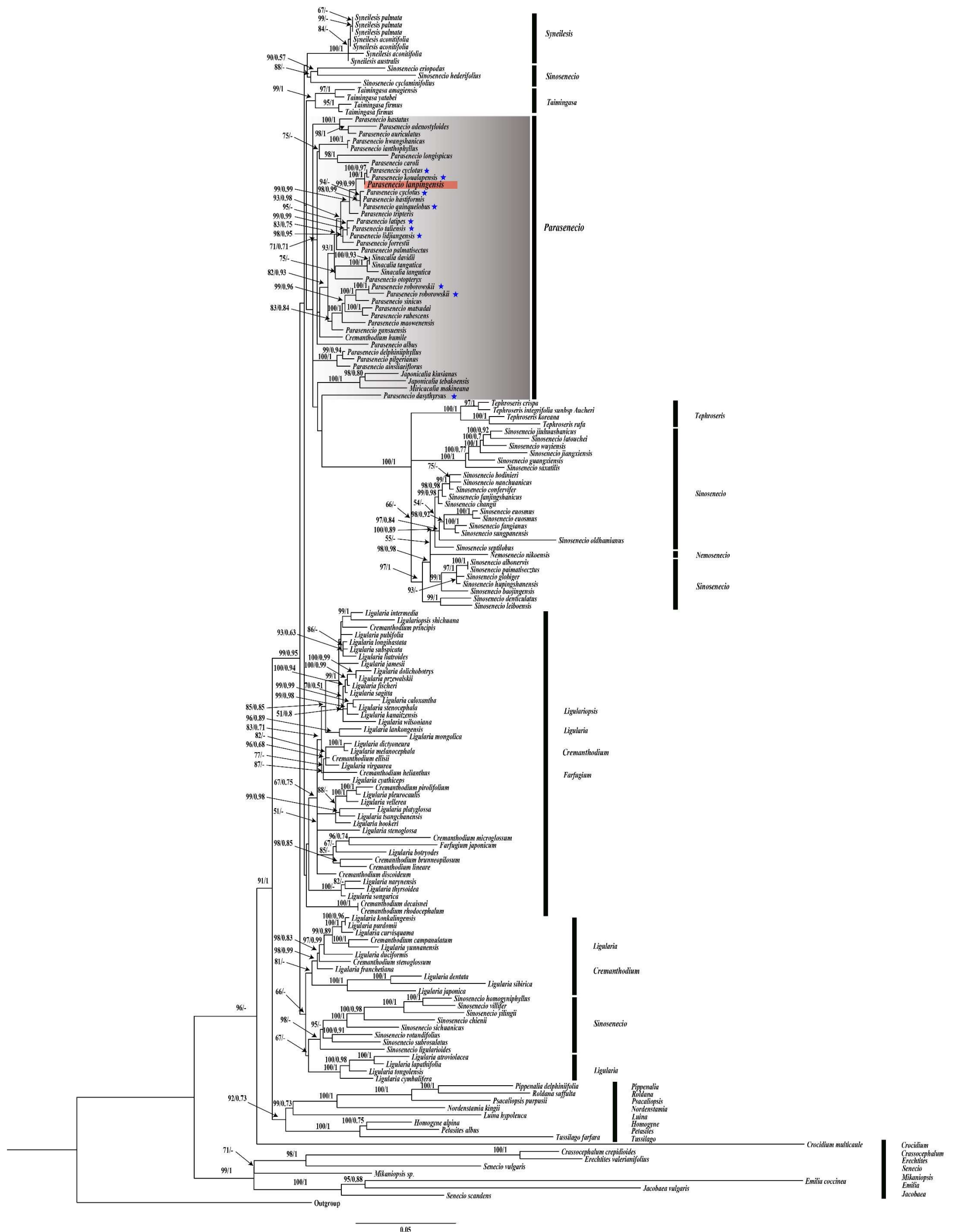
The following supplementary materials are available for this article: Liu, J., Jiang, X. 2025 *Parasenecio lanpingensis* (Asteraceae), a new species from Yunnan, China. *Taiwania* 70(3): 403–410. doi: 10.6165/tai.2024.70.403

**Table S1.** ITS and ETS accession numbers of 163 homologous sequences.

| Species                               | ITS      | ETS      | Species                                | ITS      | ETS      |
|---------------------------------------|----------|----------|----------------------------------------|----------|----------|
| 1 <i>Crassocephalum crepidioides</i>  | AF459968 | GU818144 | 83 <i>Parasenecio gansuensis</i>       | KY979077 | KY978997 |
| 2 <i>Cremanthodium brunneopilosum</i> | AY176131 | \        | 84 <i>Parasenecio hastatus</i>         | KY979052 | KY978972 |
| 3 <i>Cremanthodium campanulatum</i>   | KY979098 | KY979018 | 85 <i>Parasenecio hastiformis</i>      | AY723278 | \        |
| 4 <i>Cremanthodium decaisnei</i>      | AY723269 | \        | 86 <i>Parasenecio hwangshanicus</i>    | KY979057 | KY978977 |
| 5 <i>Cremanthodium discoideum</i>     | AY723271 | \        | 87 <i>Parasenecio ianthophyllus</i>    | KY979071 | KY978991 |
| 6 <i>Cremanthodium ellisii</i>        | AY723272 | \        | 89 <i>Parasenecio kiusianus</i>        | KY979083 | KY979003 |
| 7 <i>Cremanthodium helianthus</i>     | KY979037 | KY978957 | 88 <i>Parasenecio koualapensis</i>     | KY979045 | KY978965 |
| 8 <i>Cremanthodium humile</i>         | EF538175 | \        | 90 <i>Parasenecio latipes</i>          | KY979081 | KY979001 |
| 9 <i>Cremanthodium lineare</i>        | AY176134 | \        | 91 <i>Parasenecio lidjiangensis</i>    | KY979043 | KY978963 |
| 10 <i>Cremanthodium microglossum</i>  | AY176135 | \        | 92 <i>Parasenecio longispicus</i>      | KY979072 | KY978992 |
| 11 <i>Cremanthodium pirolifolium</i>  | KY979102 | KY979022 | 93 <i>Parasenecio maowenensis</i>      | AY723275 | \        |
| 12 <i>Cremanthodium principis</i>     | KY979060 | KY978980 | 94 <i>Parasenecio matsudai</i>         | KY979103 | KY979023 |
| 13 <i>Cremanthodium rhodocephalum</i> | KY979099 | KY979019 | 95 <i>Parasenecio otopteryx</i>        | KY979054 | KY978974 |
| 14 <i>Cremanthodium stenoglossum</i>  | AY176136 | \        | 96 <i>Parasenecio palmatisectus</i>    | KY979080 | KY979000 |
| 15 <i>Crocidium multicaule</i>        | GU818541 | GU818146 | 97 <i>Parasenecio pilgerianus</i>      | KY979058 | KY978978 |
| 16 <i>Emilia coccinea</i>             | AF459966 | GU818159 | 98 <i>Parasenecio quinquelobus</i>     | KY979046 | KY978966 |
| 17 <i>Erechtites valerianifolius</i>  | EF538199 | GU818162 | 99 <i>Parasenecio roborowskii</i>      | AY176151 | \        |
| 18 <i>Farfugium japonicum</i>         | AY176139 | \        | 100 <i>Parasenecio roborowskii</i>     | KY979074 | KY978994 |
| 19 <i>Homogyne alpina</i>             | GU817576 | GU818183 | 101 <i>Parasenecio rubescens</i>       | KY979078 | KY978998 |
| 20 <i>Jacobaea vulgaris</i>           | GU818567 | GU818190 | 102 <i>Parasenecio sinicus</i>         | KY979055 | KY978975 |
| 21 <i>Ligularia atroviolacea</i>      | DQ272322 | \        | 103 <i>Parasenecio taliensis</i>       | KY979076 | KY978996 |
| 22 <i>Ligularia botryodes</i>         | AY176140 | \        | 104 <i>Parasenecio tebakaensis</i>     | KY979086 | KY979006 |
| 23 <i>Ligularia caloxantha</i>        | DQ272345 | \        | 105 <i>Parasenecio tripteris</i>       | KY979075 | KY978995 |
| 24 <i>Ligularia curvisquama</i>       | DQ272324 | \        | 106 <i>Parasenecio yatabei</i>         | KY979092 | KY979012 |
| 25 <i>Ligularia cyathiceps</i>        | DQ272328 | \        | 107 <i>Petasites albus</i>             | GU818620 | GU818228 |
| 26 <i>Ligularia cymbulifera</i>       | KY979033 | KY978953 | 108 <i>Pippenalia delphiniifolia</i>   | GU817571 | GU818230 |
| 27 <i>Ligularia dentata</i>           | KY979064 | KY978984 | 109 <i>Psacaliopsis purpusii</i>       | GU818629 | GU818235 |
| 28 <i>Ligularia dictyoneura</i>       | KY979095 | KY979015 | 110 <i>Roldana suffulta</i>            | GU818631 | GU818246 |
| 29 <i>Ligularia dolichobotrys</i>     | AY176141 | \        | 111 <i>Senecio scandens</i>            | AF459932 | GU818294 |
| 30 <i>Ligularia duciformis</i>        | KY979084 | KY979004 | 112 <i>Senecio vulgaris</i>            | AF422136 | HQ439855 |
| 31 <i>Ligularia fischeri</i>          | KY979035 | KY978955 | 113 <i>Sinacalia caroli</i>            | KY979047 | KY978967 |
| 32 <i>Ligularia franchetiana</i>      | AB375311 | \        | 114 <i>Sinacalia davidii</i>           | KY979082 | KY979002 |
| 33 <i>Ligularia hookeri</i>           | KY979068 | KY978988 | 116 <i>Sinacalia tangutica</i>         | AY176157 | GU818309 |
| 34 <i>Ligularia intermedia</i>        | KY979066 | KY978986 | 115 <i>Sinacalia tangutica</i>         | KY979036 | KY978956 |
| 35 <i>Ligularia jamesii</i>           | KY979038 | KY978958 | 117 <i>Sinosenecio albonervis</i>      | JF978571 | \        |
| 36 <i>Ligularia japonica</i>          | KY979065 | KY978985 | 118 <i>Sinosenecio baojingensis</i>    | KT150042 | \        |
| 37 <i>Ligularia kanaitzensis</i>      | KY979097 | KY979017 | 119 <i>Sinosenecio bodinieri</i>       | KT149888 | \        |
| 38 <i>Ligularia konkalingensis</i>    | DQ272343 | \        | 120 <i>Sinosenecio changii</i>         | KT149885 | \        |
| 39 <i>Ligularia lankongensis</i>      | KY979100 | KY979020 | 121 <i>Sinosenecio chienii</i>         | JF978574 | \        |
| 40 <i>Ligularia lapathifolia</i>      | KY979063 | KY978983 | 122 <i>Sinosenecio confervifer</i>     | KT149893 | \        |
| 41 <i>Ligularia liatroides</i>        | KY979061 | KY978981 | 123 <i>Sinosenecio cyclaminifolius</i> | JF978576 | \        |
| 42 <i>Ligularia longihastata</i>      | DQ272339 | \        | 124 <i>Sinosenecio denticulatus</i>    | JF978581 | \        |
| 43 <i>Ligularia melanocephala</i>     | AY723266 | \        | 125 <i>Sinosenecio eriopodus</i>       | KT150043 | \        |
| 44 <i>Ligularia mongolica</i>         | GU323282 | \        | 126 <i>Sinosenecio euosmus</i>         | GU818710 | GU818310 |
| 45 <i>Ligularia narynensis</i>        | AY456130 | \        | 127 <i>Sinosenecio euosmus</i>         | JF978585 | \        |
| 46 <i>Ligularia platyglossa</i>       | KY979096 | KY979016 | 128 <i>Sinosenecio fangianus</i>       | KT149883 | \        |
| 47 <i>Ligularia pleurocaulis</i>      | KY979024 | KY978944 | 129 <i>Sinosenecio fanjingshanicus</i> | KT149887 | \        |
| 48 <i>Ligularia przewalskii</i>       | KY979049 | KY978969 | 130 <i>Sinosenecio globiger</i>        | JF978594 | \        |
| 49 <i>Ligularia pubifolia</i>         | GU444022 | \        | 131 <i>Sinosenecio guangxiensis</i>    | JF978599 | \        |
| 50 <i>Ligularia purdomii</i>          | AY723257 | \        | 132 <i>Sinosenecio hederifolius</i>    | KT149905 | \        |
| 51 <i>Ligularia sagitta</i>           | KY979051 | KY978971 | 133 <i>Sinosenecio homogynophyllus</i> | JF978600 | \        |
| 52 <i>Ligularia sibirica</i>          | AY176146 | \        | 134 <i>Sinosenecio hupingshanensis</i> | KT149898 | \        |
| 53 <i>Ligularia songarica</i>         | KY979042 | KY978962 | 135 <i>Sinosenecio jiangxiensis</i>    | KT149879 | \        |
| 54 <i>Ligularia stenocephala</i>      | KY979094 | KY979014 | 136 <i>Sinosenecio jiuhuashanicus</i>  | JF978606 | \        |
| 55 <i>Ligularia stenoglossa</i>       | AB523365 | \        | 137 <i>Sinosenecio latouchei</i>       | JF978612 | \        |
| 56 <i>Ligularia subspicata</i>        | KY979067 | KY978987 | 138 <i>Sinosenecio leiboensis</i>      | KT149884 | \        |
| 57 <i>Ligularia thyrsoides</i>        | DQ272320 | \        | 139 <i>Sinosenecio ligularioides</i>   | JF978615 | \        |
| 58 <i>Ligularia tongolensis</i>       | KY979062 | KY978982 | 140 <i>Sinosenecio nanchuanicus</i>    | KT149895 | \        |
| 59 <i>Ligularia tsangchanensis</i>    | KY979039 | KY978959 | 141 <i>Sinosenecio oldhamianus</i>     | JF978618 | \        |
| 60 <i>Ligularia vellerea</i>          | KY979032 | KY978952 | 142 <i>Sinosenecio palmatisectus</i>   | JF978620 | \        |



|    |                                     |          |          |     |                                  |          |          |
|----|-------------------------------------|----------|----------|-----|----------------------------------|----------|----------|
| 61 | <i>Ligularia virgaurea</i>          | KY979040 | KY978960 | 143 | <i>Sinosenecio rotundifolius</i> | KT149907 | \        |
| 62 | <i>Ligularia wilsoniana</i>         | KY979069 | KY978989 | 144 | <i>Sinosenecio saxatilis</i>     | KT149882 | \        |
| 63 | <i>Ligularia yunnanensis</i>        | KY979034 | KY978954 | 145 | <i>Sinosenecio septilobus</i>    | JF978624 | \        |
| 64 | <i>Ligulariopsis shichuana</i>      | AY176148 | \        | 146 | <i>Sinosenecio sichuanicus</i>   | JF978626 | \        |
| 65 | <i>Luina hypoleuca</i>              | GU818593 | GU818201 | 147 | <i>Sinosenecio subrosulatus</i>  | KT149909 | \        |
| 66 | <i>Mikaniopsis sp</i>               | EF538172 | GU818140 | 148 | <i>Sinosenecio sungpanensis</i>  | JF978633 | \        |
| 67 | <i>Miricacalia makineana</i>        | KY979091 | KY979011 | 149 | <i>Sinosenecio villifer</i>      | JF978634 | \        |
| 68 | <i>Nemosenecio nikoensis</i>        | EF538264 | \        | 150 | <i>Sinosenecio wuyiensis</i>     | KT149877 | \        |
| 69 | <i>Nordenstamia kingii</i>          | EF538267 | GU818215 | 151 | <i>Sinosenecio yilingii</i>      | JF978638 | \        |
| 70 | <i>Othonna capensis</i>             | AF459960 | GU818218 | 152 | <i>Syneilesis aconitifolia</i>   | AY176163 | \        |
| 71 | <i>Parasenecio adenostyloides</i>   | AF459970 | GU818224 | 154 | <i>Syneilesis aconitifolia</i>   | KJ561179 | \        |
| 72 | <i>Parasenecio ainsliaeiflorus</i>  | KY979030 | KY978950 | 153 | <i>Syneilesis aconitifolia</i>   | KY979101 | KY979021 |
| 73 | <i>Parasenecio albus</i>            | KY979025 | KY978945 | 155 | <i>Syneilesis australis</i>      | KY979027 | KY978947 |
| 74 | <i>Parasenecio amagiensis</i>       | KY979088 | KY979008 | 158 | <i>Syneilesis palmata</i>        | EF538401 | GU818314 |
| 75 | <i>Parasenecio auriculatus</i>      | KY979053 | KY978973 | 156 | <i>Syneilesis palmata</i>        | KY979085 | KY979005 |
| 76 | <i>Parasenecio cyclotus</i>         | AY723277 | \        | 157 | <i>Syneilesis palmata</i>        | KY979087 | KY979007 |
| 77 | <i>Parasenecio cyclotus</i>         | KY979028 | KY978948 | 159 | <i>Tephroseris crispa</i>        | EF538407 | \        |
| 78 | <i>Parasenecio dasythyrsus</i>      | KY979073 | KY978993 | 160 | <i>Tephroseris integrifolia</i>  | GU818724 | GU818319 |
| 79 | <i>Parasenecio delphiniiphyllus</i> | KY979044 | KY978964 | 161 | <i>Tephroseris koreana</i>       | JF978608 | \        |
| 80 | <i>Parasenecio firmus</i>           | KT119542 | \        | 162 | <i>Tephroseris rufa</i>          | AY176166 | \        |
| 81 | <i>Parasenecio firmus</i>           | KY979026 | KY978946 | 163 | <i>Tussilago farfara</i>         | AY176167 | \        |
| 82 | <i>Parasenecio forrestii</i>        | KY979029 | KY978949 |     |                                  |          |          |



**Fig. S1.** Maximum Likelihood (ML) tree of *Parasenecio lanpingensis* and related 162 species, based on ITS and ETS sequences. Bayesian posterior probabilities (PPs)  $\geq 0.95$  and bootstrap values (maximum likelihood; MLBS)  $\geq 50$  are indicated above the branches. Species of *Parasenecio* are labelled in grey shading, and the newly found species is marked with red shading. Species of the sect. *Monanthae* are marked with blue five-pointed star.

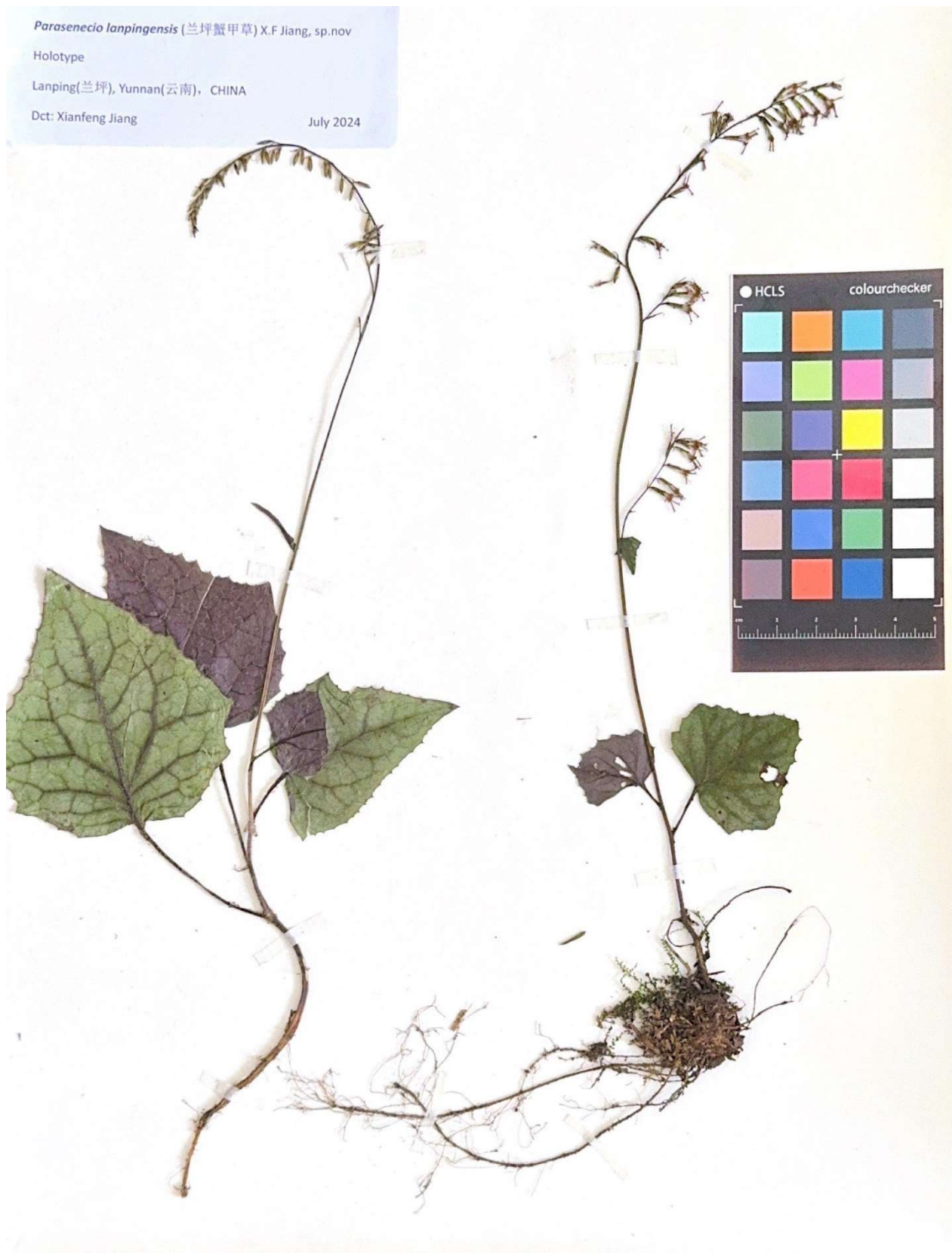


Fig. S2 Holotype (Jiang KKZW1160) of *Parasenecio lanpingensis* sp. nov.