

**Table S1 Six species newly sequenced with voucher and GenBank accession numbers.**

| <b>Tribes</b> | <b>Taxa</b>                    | <b>Locality</b>  | <b>Voucher information</b> | <b>GenBank Accession</b> |
|---------------|--------------------------------|--|----------------------------|--------------------------|
| Gratioleae    | <i>Adenosma glutinosum</i>     | Hani-Yi Autonomous Prefecture of Honghe, Yunnan, China | S10027                     | OQ129603                 |
|               | <i>Deinostema violacea</i>     | Wuhan, Hubei, China                                    | S16126                     | OQ129604                 |
|               | <i>Trapella sinensis</i>       | Fuyuan, Heilongjiang, China                            | JYH103                     | OQ129605                 |
| Sibthorpieae  | <i>Ellisiophyllum pinnatum</i> | Kunming, Yunnan, China                                 | XPX14                      | OQ129606                 |
| Antirrhineae  | <i>Linaria buriatica</i>       | Hulun Buir, Inner Mongolia Autonomous Region, China    | J3058                      | OQ129607                 |
| Russelieae    | <i>Russelia equisetiformis</i> | Kunming, Yunnan, China                                 | XPX15                      | OQ129608                 |