

Supplementary material

Figure A1. Scanning electron micrographs of trichome in *Phlomis* spp. (Lamiaceae-Lamiaceae). (a) *P. affinis*: extremely long simple non-glandular trichomes, (b) *P. agraria*: long simple non-glandular trichomes, (c) *P. alberti*: stalked glandular trichomes, (d) *P. atropurpurea*: long simple non-glandular trichomes, (e) *P. baldshuanica*: branched non-glandular trichomes, (f) *P. beckeri*: long simple non-glandular trichomes, (g) *P. betonicoides*: sessile glandular trichomes, (h) *P. breviflora*: branched non-glandular trichomes, (i) *P. dentosa*: sessile glandular trichomes, (j) *P. ebracteolata*: stalked glandular trichomes, (k) *P. ebracteolata*: branched non-glandular trichomes, (l) *P. fulgens*: stalked glandular trichomes, (m) *P. isochila*: branched non-glandular trichomes, (n) *P. kirghisorum*: long simple non-glandular and stalked glandular trichomes, (o) *P. kurpsaica*: branched non-glandular and stalked glandular trichomes.

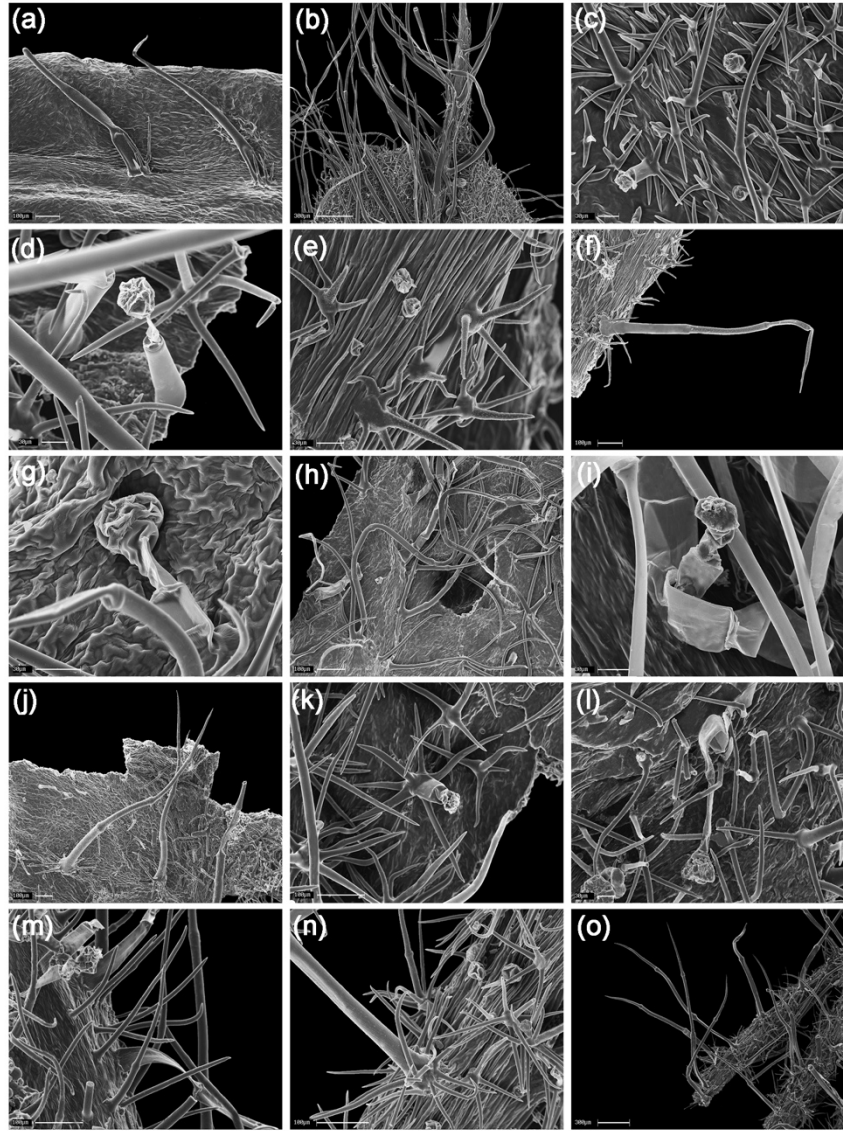


Figure A2. Scanning electron micrographs of trichome in *Phlomooides* spp. (Lamioideae-Lamiaceae). (a) *P. melanantha*: branched non-glandular trichomes, (b), *P. oreophila*, branched non-glandular trichomes, (c) *P. oreophila*: branched non-glandular and branched glandular trichomes, (d) *P. pulchra*: stalked glandular trichomes, (e) *P. rutilis*: branched non-glandular and sessile glandular trichomes, (f) *P. rutilis*: branched non-glandular trichomes, (g) *P. salangensis*: stalked glandular trichomes, (h) *P. salangensis*: branched non-glandular trichomes, (i) *P. seravschanica*: stalked glandular trichomes, (j) *P. spectabilis*: branched non-glandular trichomes, (k) *P. uniflora*: branched glandular trichomes, (l) *P. urodonta*: stalked glandular trichomes, (m) *P. vavilovii*: long simple non-glandular trichomes, (n) *P. younghushandii*: branched non-glandular trichomes, (o) *P. younghushandii*: branched non-glandular trichomes.