

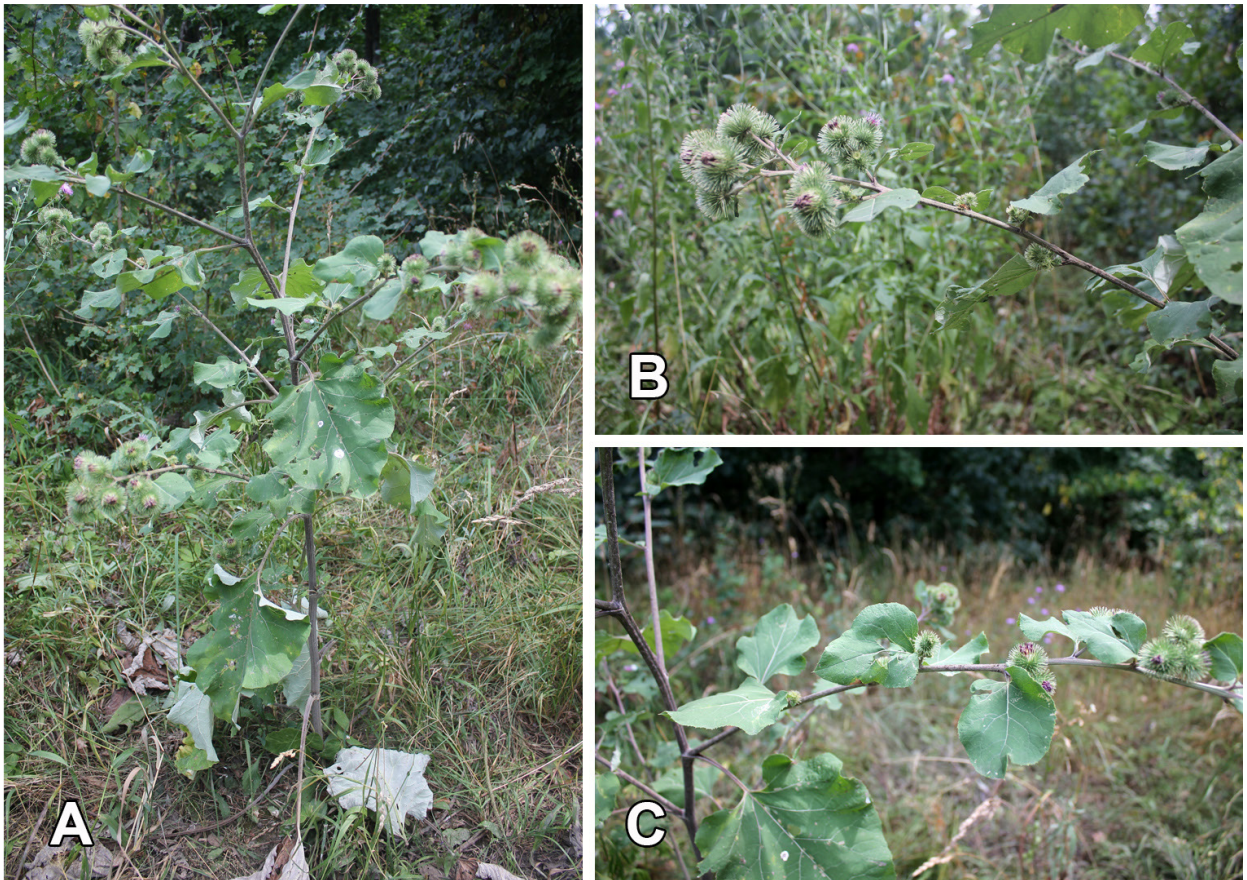


Fig. S1. *Arctium x cimbricum*. A: general habit; B, C: general inflorescences. Photos by H. Bondarenko



Fig. S2. *Betula x aurata*. A: general habit; B: shoots with leaves; C: young branch. Photos by H. Bondarenko (Artiukhivka village, Chuhuiv District, Kharkiv Region, Ukraine; 1 September 2024)



Fig. S3. Species of *Centaurea* and their hybrid. A: *C. stoebe*; B: *C. x psammogena*; C: *C. diffusa*. Photos by H. Bondarenko



Fig. S4. A fragment of the herbarium specimen demonstrating the polymorphism of *Centaurea x psammogena* compared to parental species (educational specimen, collector unknown, KW s.n.)



Fig. S5. Heads of two species of *Psephellus* and their hybrid. A: *P. carbonatus*; B: *P. carbonatus* × *P. sumensis* (KW s.n.); C: *P. sumensis*. Photo A by I. Pyshnyi, photos B–C by H. Bondarenko

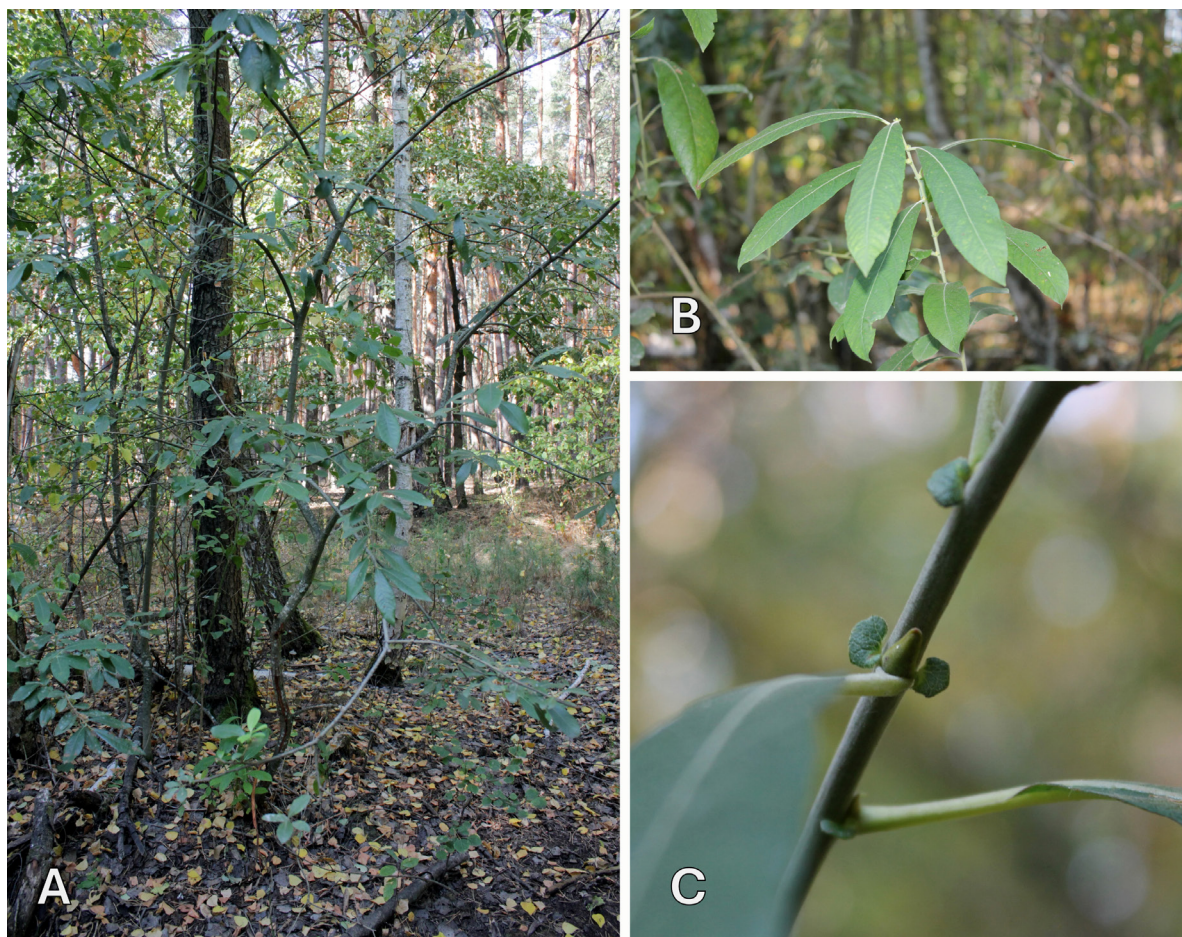


Fig. S6. *Salix* × *reichardtii*. A: general habit; B: young branch with leaves; C: stipules and buds. Photos by H. Bondarenko (near Tymchenky village, Chuhuiv District, 24 August 2024)



Fig. S7. Comparison of two species of *Salvia* and their hybrid. A: *S. nemorosa*; B: *S. nemorosa* × *S. nutans*; C: *S. nutans*. Photos by H. Bondarenko

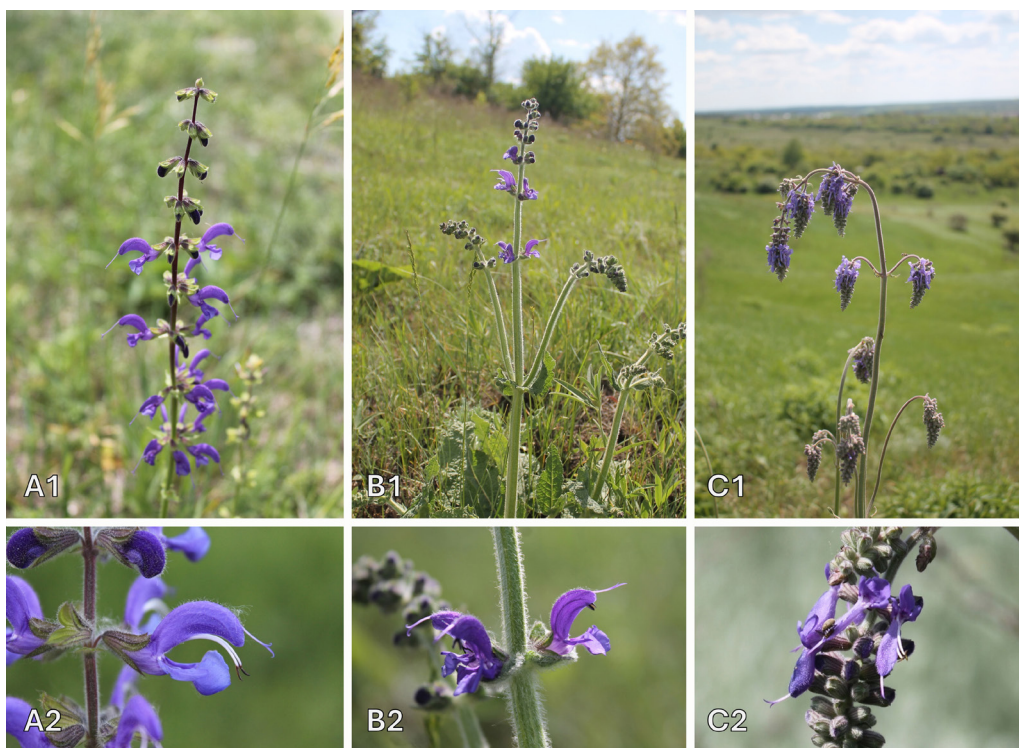


Fig. S8. Comparison of two species of *Salvia* and their hybrid. A: *S. pratensis*; B: *S. × simonkaiana*; C: *S. nutans*; 1 — general habit of inflorescences; 2 — flowers. Photos by H. Bondarenko

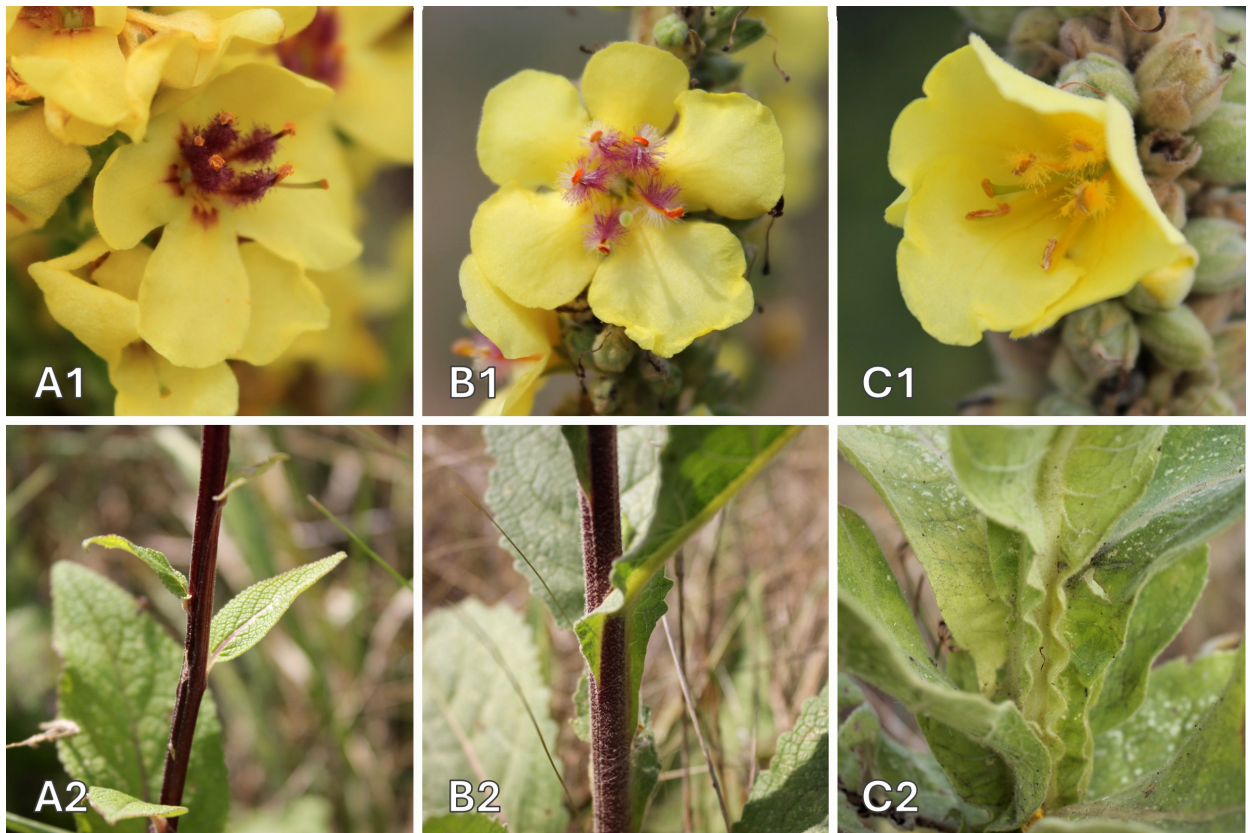


Fig. S9. Morphological comparison of two species of *Verbascum* and their hybrid. A: *V. nigrum*; B: *V. x ambiguum*; C: *V. densiflorum*; 1 — flowers; 2 — middle leaves base. Photos by H. Bondarenko

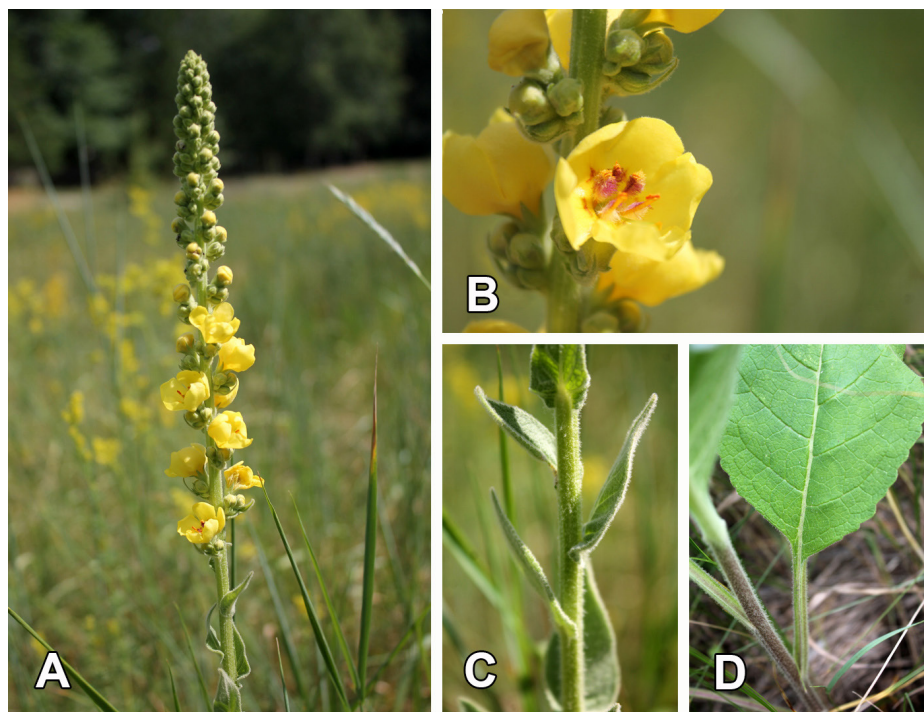


Fig. S10. *Verbascum* $\times$ *brockmuelleri*. A: inflorescence; B: flower; C: middle cauline leaves; D: base of the lower cauline leaf. Photo by H. Bondarenko



Fig. S11. Hybrids of species of *Verbascum* that originated with participation of *V. phoeniceum*. A: *V. x ignescens* (Tausch, 1823); B: *V. x rubiginosum* (Waldstein, Kitaibel, 1805)

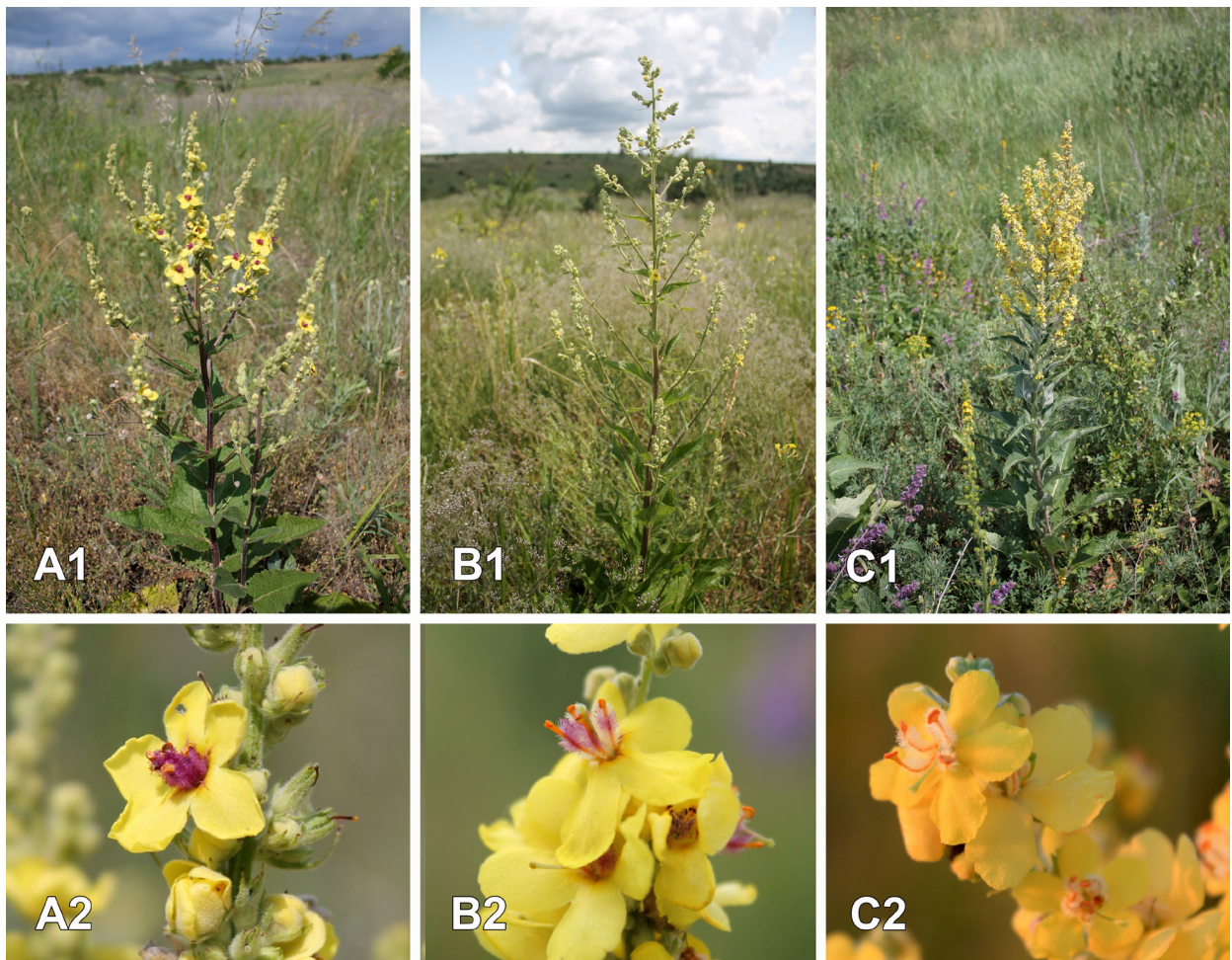


Fig. S12. Morphological comparison of two species of *Verbascum* and their hybrid. A: *V. chaixii*; B: *V. × pseudolychnitis*; C: *V. lychnitis*; 1 — general habits of plants; 2 — flowers. Photos by H. Bondarenko

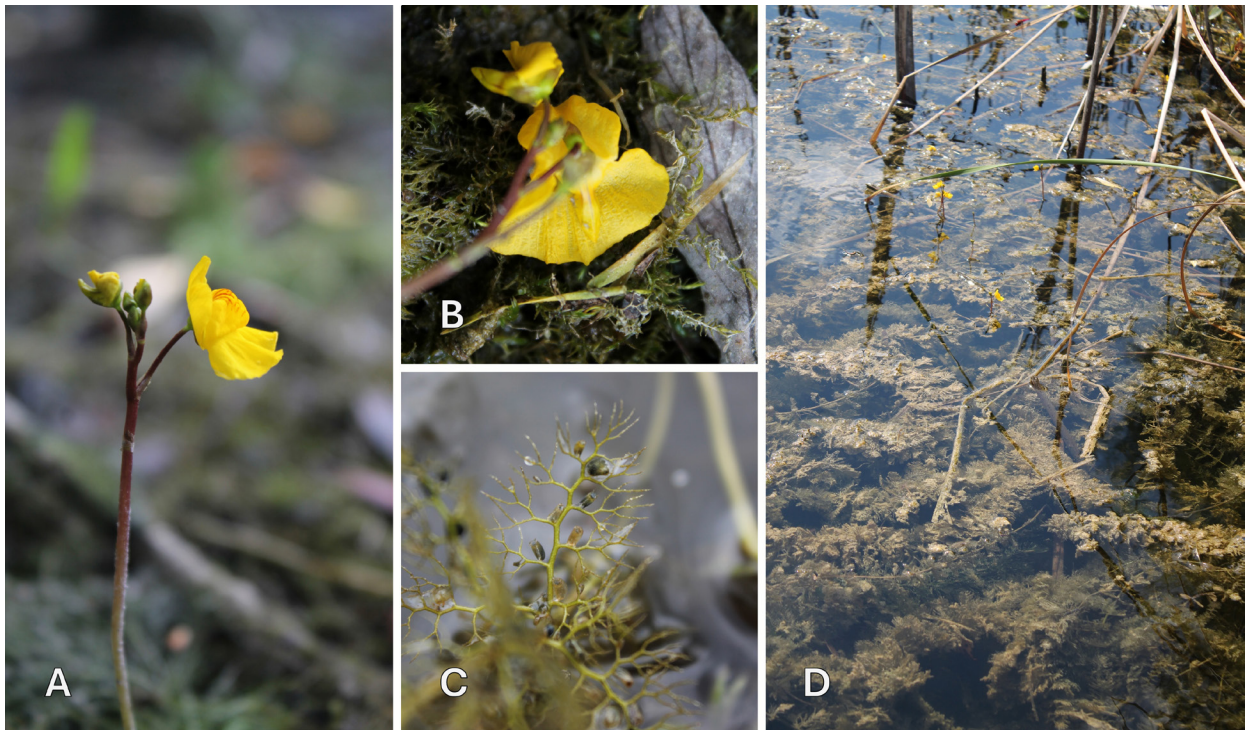


Fig. S13. *Utricularia* $\times$ *neglecta*. A: general habit of the inflorescence; B: flower from the downside (spur); C: leaves with bladder-like traps; D: natural habitat of the hybrid (Dytbudynivskyi Pond, Bidriahy village vicinity, Kharkiv Region, 1 August 2024). Photos by H. Bondarenko