



## Supplement

The following supplementary materials are available for this article: Ullah, T., Khan A., Khan, R., Sultan, A., Ali, S., Kazi, M. 2025 Pollen morphology of the *Galium* L. (Rubiaceae-Rubiaceae) from Pakistan and evaluation of its systematic significance. *Taiwania* 70(2): 207-218. doi: [10.6165/ta.2025.70.207](https://doi.org/10.6165/ta.2025.70.207)

**Table S1.** List of *Galium* species examined in this study with (synonyms, sections, voucher information and status), that occurring in Pakistan..

Taxa	Synonym	Section	Locality, voucher, elevation, collector's, date of collection	Status
<i>G. acutum</i> Edgew.	<i>G. himalayense</i> Klotzsch & Garcke	<i>Kolgyda</i> Dumort.	Khyber Pakhtunkhwa: Haripur district, Margalla hills National Park near Darkot Bridge, [RAW 102474], 3,655 ft, A. Khan & A. Sultan, 20 October, 2022	Native
<i>G. aparine</i> L.	<i>G. lappaceum</i> Salisb.	<i>Kolgyda</i> Dumort.	Khyber Pakhtunkhwa: Swat district, near Barikot, [RAW 27480], 2,653 ± ft, R. R. Stewart, 7 April, 1956	Native/introduced
<i>G. asperifolium</i> Wall.	<i>G. mollugo</i> subsp. <i>asperifolium</i> (Wall.) Kitam.	<i>Trachygalium</i> K. Schum.	Punjab: Rawalpindi district, Murree hills Kashmir point, [RAW 90968], 70,00 ± ft, M. A. Siddequi & Y. Nasir, 21 October, 1970	Native/introduced
<i>G. asperuloides</i> Edgew.	<i>Asperula consanguinea</i> Klotzsch	<i>Hylaea</i> (Griseb.) Ehrend.	Kashmir, Neelum district, Arungkel tract, [RAW 102327], 8,175 ft, A. Sultan & A. Khan, 27 June, 2022.	Native
<i>G. boreale</i> L.	<i>G. utahense</i> Eastw.	<i>Platygalium</i> W. Koch.	Gilgit-Baltistan, Skardu district, Deosai Bawai (Chogochu) Lungma, [RAW 102306], 11,641 ± ft, C. Jones & A. M Buchanan, 7 September, 1998.	Native
<i>G. campylotrichum</i> Nazim. & Ehrend.	Not recorded		Khyber Pakhtunkhwa: Kurrum district, Parachinar, above Makai village, [RAW 6556], 7,500 ft., M. A. Siddequi & Y. Nasir, 30 August, 1971.	Endemic to Pakistan
<i>G. ceratophylloides</i> Hook. f.	Not recorded		Kashmir: Baramulla district, near Gulmerg, [RAW 28407], 8,000 ft., R.R. Stewart, 28 August, 1926.	Endemic to Kashmir
<i>G. cryptanthum</i> Hemsl.	<i>G. stewartii</i> Nazim.	<i>Platygalium</i> W. Koch.	Khyber Pakhtunkhwa: Dir district, Gujjar, [RAW 28402], 6,428 ft, R.R. Stewart, E. Nasir & M. A. Siddequi, 31 August, 1962.	Native
<i>G. elegans</i> Wall. ex Roxb.	<i>G. vestitum</i> D.Don	<i>Platygalium</i> W. Koch.	Khyber Pakhtunkhwa: Haripur district, Margalla hills National Park, Makhnial, [RAW 101484], 5,139 ± ft, A. Sultan, 10 September, 2020.	Native/introduced
<i>G. ghilanicum</i> Stapf	<i>G. chitralensis</i> Nazim.	<i>Kolgyda</i> Dumort.	Khyber Pakhtunkhwa: Chitral district, Bamburet Payen, [RAW 101922], 5,275 ± ft, A. Sultan & M. Rashid, 6 June, 2016.	Native/introduced
<i>G. hirtiflorum</i> Req. ex DC.	<i>G. hirtiflorum</i> var. <i>hirsutum</i> T.Yamaz.		Khyber Pakhtunkhwa: Abbottabad district, Nathia Gali [RAW 28924], 8,000 ± ft., R.R. Stewart, 11 August, 1959.	Native
<i>G. saturejifolium</i> Trevir.	<i>G. palustre</i> L.		Kashmir: Neelum district, Rati Gali Nala, Bela, [RAW 102339], 5,200 ft., A. Sultan & A. Khan, 28 June, 2022.	Native
<i>G. serpylloides</i> Royle ex Hook. f.	Not recorded		Kashmir: Poonch district, Bedori, [RAW 24028], 10,000 ft., R.R. Stewart & E. Nasir, 2 July, 1952.	Sub-endemic to Pakistan
<i>G. setaceum</i> Lam.	<i>G. decaisnei</i> Boiss.	<i>Jubogalium</i> Ehrend.	Balochistan, Quetta district, near Hanna Lake, [RAW 4736], 5,000 ± ft, Z. Ali, 23 May, 1968.	Native/introduced
<i>G. spurium</i> L.	<i>G. pauciflorum</i> Bunge <i>G. ibicinum</i> Boiss. & Hausskn		Kashmir: Bagh district, near Dal Lake, [RAW 19412], 5,200 ft., R.R. Stewart, 14 July, 1940.	Native/introduced
<i>G. subfalcatum</i> Nazim. & Ehrend.	Not recorded		Khyber Pakhtunkhwa: Abbottabad district, Thandiani, [RAW 27765], 8,000 ± ft., R.R. Stewart, 4 August, 1956.	Endemic to Pakistan
<i>G. tenuissimum</i> M.Bieb.	<i>G. tenuissimum</i> f. <i>trichophorum</i> (Kar. & Kir.) Ehrend. & Schönb.-Tem.	<i>Kolgyda</i> Dumort.	Kashmir, Neelum district, Sharda, [RAW 102376], 6,451 ± ft, A. Sultan & A. Khan, 27 June, 2022.	Native
<i>G. tetraphyllum</i> Nazim. & Ehrend.	Not recorded	<i>Trachygalium</i> K. Schum.	Punjab: Rawalpindi district, Murree, Gharial hills, [RAW 28301], 70,00 ft, M. R. R. Stewart, 7 September, 1918.	Endemic to Pakistan
<i>G. tricornutum</i> Dandy	<i>G. borbonicum</i> Cordem.	<i>Kolgyda</i> Dumort.	Khyber Pakhtunkhwa: Kurrum district, Parachinar, Pewarh, Spin Khwarh [RAW 102132], 5,941 ± ft., A. Sultan, A. Mehmood, W. Hassanain & N, A, Shah, 21 May, 2021.	Native/introduced or extinct
<i>G. verum</i> L.	<i>G. floridum</i> Salisb.		Gilgit-Baltistan, Gilgit district, above Chaprot near Chalt, [RAW 18816], 9,905 ± ft, Y. Nasir & A. Gohar, 29 August, 1988.	Native



Fig. S1. Field photographs of *Galium* species in natural habitats: A–B *G. aparine*, C–D *G. asperifolium*, (E–G) *G. asperuloides*, (H–J) *G. boreale*, (K–L) *G. elegans*.



**Fig. S2.** Field photographs of *Galium* species in natural habitats: **A–C** *G. ghilanicum*, **D** *G. cryptanthum*, **E–G** *G. spurium*, **H–I** *G. tenuissimum*, **J–L** *G. tricorutum*.