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A considerable review on type specimens of Korean vascular plants in the Herbarium of the Komarov Botanical Institute (LE) Addition

Alisa E. Grabovskaya-Borodina[1], Irina D. Illarionova[1], Hyun-Do Jang[2], Byoungyoon Lee[2], Min Hwan Suh[2] and Jeong Mi Park[2,*]

[1]*Komarov Botanical Institute, Professor Popov Street 2, Saint Petersburg 197376, Russia*
[2]*National Institute of Biological Resources, Environmental Research Complex, Incheon 22689, Republic of Korea*

**Correspondent: jmpark99@korea.kr*

The review provides the information about 46 type specimens on 35 taxa of vascular plants from Korea (Fig. 1), kept in the Herbarium of the Komarov Botanical Institute of the Russian Academy of Sciences in addition to 150 taxa published before. Lectotype of *Ligustrum patulum* Palib is designated here.

Keywords: Komarov Botanical Institute, Korea, Type specimens, vascular plants

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This review provides the information about 46 type materials of 35 taxa described from Korea. It is the addition to the list published before (Grabovskaya-Borodina *et al*., 2013) and the illustrated book with CD-disk (Kwak *et al*., 2013). These specimens were found and identified during work on the compilation of a database and digitalization of herbarium material from Korea in the framework of the <Joint Research Project Agreement between Komarov Botanical Institute of the Russian Academy of Sciences and National Institute of Biological Resources of the Ministry of Environment, Republic of Korea>. The list of type specimens begins with Polypodiophyta and then is alphabetically ordered for the names of Angiosperms families, genera and species. Labels are given in original transcription, but Komarov's Russian labels were translated in Latin.

Ord. Polypodiophyta

1. ***Selliguea coraiensis*** Christ, Repert. Spec. Nov. Regni Veg. 5: 11. 1908.

Isotype: In rupibus torrentium Quelpaert, X 1906, U. Faurie 68 (LE01000272).

Ord. Magnoliophyta

Aceraceae

2. ***Acer triflorum*** Kom., Acta Horti Petrop. 18, 3: 430. 1901.

Syntype: Ad ripas fl. Jalu super., descensus ad pag. Sangsuu, distr. Samsu, 4 VII 1897, V.L. Komarov (LE01005880).

Note. This specimen was cited in Grubov V.I. (ed.) 2004: 21, but absent in Grabovskaya-Borodina *et al*. 2013: 192 and Kwak *et al*. 2013: 124-125.

3. ***Acer triflorum*** Kom. f. ***subcoriacea*** Kom., Acta Horti Petrop. 22: 730. 1904.

Syntype: Korea septentrionalis, trajectum Czachin ien, prope pag. Jalu infra Mao-ell-schan, 1 XI 1897, V.L. Komarov (LE01005883).

4. ***Acer tschonoskii*** Maxim. var. ***rubripes*** Kom., Acta Horti Petrop. 22: 736. 1904.

Syntype: Trajectum Peksanien ad meridiem ad opp. Samsu, 5 VIII 1897, V.L. Komarov (LE01005892).

Araliaceae

5. ***Dendropanax morbiferum*** H. Lév., Repert. Spec. Nov. Regni Veg. 8: 283. 1910.

Syntype: Secus torrentes Quelpaert, X 1906, U. Faurie 547 (LE01007511).

Syntype: Quelpaert, circa Hongno, VII 1907, U. Faurie 1663 (LE01009278).

Syntype: Quelpaert, in sylvis, 500 m, 4 IX 1908, Taquet 895 (LE01007508).

Asteraceae

6. ***Artemisia fauriei*** Nakai, Bot. Mag. Tokyo 29: 7. 1915.

Syntype: secus mare Chemulpo, 28 IX 1901, U. Faurie 358 (LE01008378).

Note. This species was published on the basis of the specimens of *U. Faurie* 358, 361, and *Ueki* 585 by T. Nakai (1915). Ling (1992) was designated the speci-

men *U. Faurie* 358 kept in TI as lectotype of *A. fauriei*. Whereas Pampanini (1927) was considered the gathering *U. Faurie* 358 as *A. fukudo* Makino because of absence hairs on the receptacles.

7. ***Artemisia feddei*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 138. 1910.

Isotype: Quelpaert, in herbidis Hongno, X 1908, Taquet 1005 (LE01008391).

8. ***Artemisia hallaisanensis*** Nakai, Bot. Mag. Tokyo 29: 7. 1915.

Syntype: in herbidis Quelpaert, X 1907, Taquet 198 (LE01008385).

9. ***Inula taquetii*** H. Lév., Repert. Spec. Nov. Regni Veg. 10: 351. 1912.

Isotype: Quelpaert, in agris Pielto, 3 X 1910, Taquet 4318 (LE01009281).

10. ***Saussurea saxatilis*** Kom., Acta Horti Petrop. 18, 6: 422. 1901, non Arv. Touv. 1871.

(= ***Saussurea komaroviana*** Lipsch. Novosti Syst. Vysch. Rast. 8: 249. 1971, pro nom. nov.)

Syntype: Ad ripas fl. Czan-dschin-gan (decursu inferiore) fl. Jalu infl., 9 VIII 1897, V.L. Komarov (LE01008657).

Syntype: In rupibus ripariis ripae sinistrae fl. Jalu-dsian infra ostium fl. Chan-dschin-gan, 11 VIII 1897, V.L. Komarov (LE01008656).

Note. In a previous article (Grabovskaya-Borodina *et al*. 2013), we published the lectotype and isolectotype of this taxon chosen by S. Lischitz (1979). These two specimens have collection date as 12 Aug. 1897 on the labels. According to protologue, type specimens were collected at 10 and 13 Aug. 1897 (Komarov, 1901). After checking the material kept in LE, we did not find any others specimens. We suppose that this is one mistake in description or on labels and specimens with collection dates 9, 11 and 12 Aug. It should be regarded as type material.

Campanulaceae

11. ***Adenophora marsupiiflora*** (Schult.) Fisch. var. ***jaluensis*** Kom., Acta Horti Petrop. 25: 560. 1907.

Syntype: Vallis fl. Checzchengan prope opp. Kapsan, zona sabuloso-glareosa, 31 VII 1897, V.L. Komarov (sub nom. *Adenophora marsupiiflora* var. *jaluensis* nova [Kom.]) (LE01008888).

Note. By protologue "Legi in valle fl. Jalu, districtu oppida Kapsan" only one of 3 specimens can be considered as syntype. Others two specimens in collection LE are materia originalis: "Vallis fl. Jalu infra opp. Chudusu, zona pratensis sabulosis, 15 VIII 1897, V. L. Komarov (sub nom. *Adenophora marsupiiflora* var. *jaluensis* nova [Kom.]) (LE01008889) and "sine label, probably V. Komarov 1897 (LE01009272)".

Caryophyllaceae

12. ***Silene oldhamiana*** Miq., Ann. Mus. Bot. Lugd.-Bat. 3: 187. 1867.

Isotype: Korean Archip., 1863, R. Oldham 76 (LE010 13488).

Convolvulaceae

13. ***Convolvulus taquetii*** H. Lév., Repert. Spec. Nov. Regni Veg. 12: 99. 1913.

Isotype: Quelpaert in sepibus Schetimri, VIII 1908, Taquet 1162 (LE01008134).

Fabaceae

14. ***Lathyrus fauriei*** H. Lév., Repert. Spec. Nov. Regni Veg. 7: 230. 1909.

Syntype: In herbidis montium Fusan, 18 V 1906, U. Faurie 454 (LE01005132).

15. ***Vicia taquetii*** H. Lév., Repert. Spec. Nov. Regni Veg. 11: 31. 1912.

Syntype: Quelpaert, in agris Hongno, 12 IV 1911, Taquet 4829 (LE01005103).

Syntype: Quelpaert S., in littore, 8 IV 1908, Taquet 4621 (LE01004688).

Syntype: Quelpaert, in agris Hongno, IV 1909, Taquet 2778 (LE01004689).

16. ***Vicia vaniotii*** H. Lév., Repert. Spec. Nov. Regni Veg. 7: 230. 1909.

Isotype: In petrosis littoris Quelpaert, X 1906, U. Faurie 385 (LE01004673).

Lamiaceae

17. ***Calamintha taquetii*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 423. 1910.

Syntype: Quelpaert in sylvis, VII 1908, Taquet 1255 (LE01008221).

18. ***Elsholtzia pseudocristata*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 424. 1910.

Syntype: Quelpaert in agris Hongno, 6 X 1908, Taquet 1222 (LE01008257).

Syntype: Quelpaert in agris Hongno, 1000 m, 20 X 1908, Taquet 1223 (LE01008258).

19. ***Lycopus coreanus*** H. Lév., Repert. Spec. Nov. Regni Veg. 8: 423. 1910.

Syntype: Quelpaert in sylvis Yengsil, 1000 m, 17 VIII 1908, Taquet 1494 (LE01008238).

Note. There is one discrepancy in indication of the year on the label and in the protologue ("1909"). Son *et al*. (2016) were treated the collection of *E. Taquet* 1494 that belongs to *L. uniflorus* Michaux, and they were designated below the collection *E. Taquet* 3104 at E as lectotype of *L. coreanus*.

20. ***Scutellaria fauriei*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 401. 1910.



Fig. 1. Type specimens of Korean vascular plants in the herbarium of the Komarov Botanical Institute. 1. *Selliguea coraiensis* Christ (LE01000272), 2. *Acer triflorum* Kom. (LE01005880), 3. *Acer triflorum* Kom. f. *subcoriacea* Kom. (LE01005883), 4. *Acer tschonoskii* Maxim. var. *rubripes* Kom. (LE01005892), 5. *Dendropanax morbiferum* H. Lév. (LE01007511), 6. *Artemisia fauriei* Nakai (LE01008378), 7. *Artemisia feddei* H. Lév. & Vaniot (LE01008391), 8. *Artemisia hallaisanensis* Nakai (LE01008385), 9. *Inula taquetii* H. Lév. (LE01009281), 10. *Saussurea saxatilis* Kom. (LE01008657), 11. *Adenophora marsupiiflora* (Schult.) Fisch. var. *jaluensis* Kom. (LE01008888), 12. *Silene oldhamiana* Miq. (LE01013488).

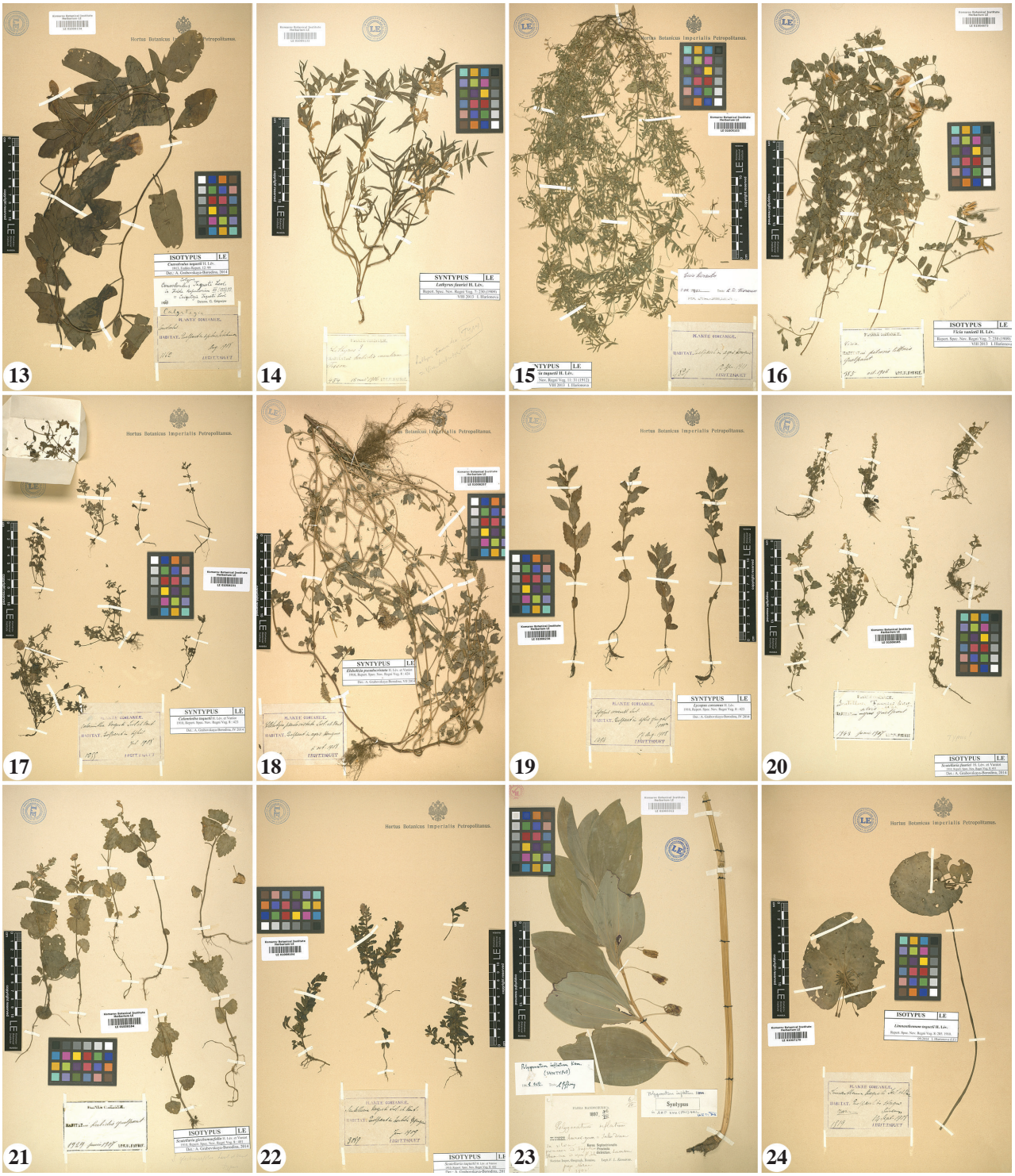


Fig. 1. Continued.
13. *Convolvulus taquetii* H. Lév. (LE01008134), 14. *Lathyrus fauriei* H. Lév. (LE01005132), 15. *Vicia taquetii* H. Lév. (LE01005103), 16. *Vicia vaniotii* H. Lév. (LE01004673), 17. *Calamintha taquetii* H. Lév. & Vaniot, (LE01008221), 18. *Elsholtzia pseudocristata* H. Lév. & Vaniot (LE01008257), 19. *Lycopus coreanus* H. Lév. (LE01008238), 20. *Scutellaria fauriei* H. Lév. & Vaniot (LE01008185), 21. *Scutellaria glechomaefolia* H. Lév. & Vaniot (LE01008184), 22. *Scutellaria taquetii* H. Lév. & Vaniot (LE01008194), 23. *Polygonatum inflatum* Kom. (LE01003312), 24. *Limnanthemum taquetii* H. Lév. (LE01007179).



Fig. 1. Continued.
25. *Chionanthus retusus* Lindl. & Paxton subsp. *fauriei* H. Lév. (01009280), 26, 27. *Ligustrum patulum* Palib. (LE01008056, LE01008039), 28. *Syringa villosa* Vahl var. *hirsuta* C.K. Schneid. (LE01008036), 29. *Agrostis divaricatissima* Mez (LE01005446), 30. *Agrostis koreana* Ohwi (LE01006072), 31. *Plantago taquetii* H. Lév. (LE01009183), 32. *Aquilegia amurensis* Kom. (LE01004138), 33. *Prunus taquetii* H. Lév. & Vaniot (LE01005794), 34. *Adina fauriei* H. Lév. (LE01009279), 35. *Asperula platygalium* Maxim. (LE01008903), 36. *Hedyotis coreana* H. Lév. (LE01004649).

Isotype: in silvis Quelpaert, VI 1907, U. Faurie 1943 (LE01008185).

21. ***Scutellaria glechomaefolia*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 401. 1910.

Isotype: in herbidis Quelpaert, VI 1907, U. Faurie 1929 (LE01008184).

22. ***Scutellaria taquetii*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 8: 402. 1910.

Isotype: Quelpaert in herbidis Tpyengeni, VI 1909, Taquet 3089 (LE01008194).

Liliaceae

23. ***Polygonatum inflatum*** Kom., Acta Horti Petrop. 18, 6: 432. 1901.

Syntype: Distr. Samsu, Flumen Amnok-gan (=Jalu dsian), in silva primaeva ad ripas fl. Jalu prope Naran, 3500'. 6 VII 1897, V.L. Komarov (LE01003312).

Menyanthaceae

24. ***Limnanthemum taquetii*** H. Lév., Repert. Spec. Nov. Regni Veg. 8: 285. 1910.

Isotype: Quelpaert, in stagno Sineum, 14 IX 1908, Taquet 1519 (LE01007179).

Oleaceae

25. ***Chionanthus retusus*** Lindl. & Paxton subsp. ***fauriei*** H. Lév., Repert. Spec. Nov. Regni Veg. 11: 297. 1912.

Isotype: in Fusan, V 1906, U. Faurie 517 (01009280).

26, 27. ***Ligustrum patulum*** Palib., Acta Horti Petrop. 18, 2: 156. 1900.

Lectotype (Grabovskaya-Borodina, designated here): Seoul: prope Tap Tong, 20 V 1895, A. Sontag (LE-LE01008056).

Isolectotype: Seoul: prope Tap Tong, 20 V 1895, A. Sontag (LE01008039).

By the protologue: "Kyong-kwi: Seoul: prope Tap-Tong 20 Maio 1895 (Sontag)".

28. ***Syringa villosa*** Vahl var. ***hirsuta*** C.K. Schneid., Repert. Spec. Nov. Regni Veg. 9: 81. 1910.

Syntype: Vallis flum. Typongo fl. Tumyngan infl. ad opp. Chorion, 18 V 1897, V.L. Komarov (LE01008036).

Syntype: Regio fl. Tumyn gan, in ascensu ad trajectum Sadi pien, 3 VI 1897, V.L. Komarov (LE01008031).

Poaceae

29. ***Agrostis divaricatissima*** Mez, Repert. Spec. Nov. Regni Veg. 18: 4. 1922.

Isotype: Herbidis secus flumen Hpyeng Yang, VII 1906, U. Faurie 1283 (LE01005446).

30. ***Agrostis koreana*** Ohwi, Repert. Spec. Nov. Regni Veg. 36: 39. 1934.

Isotype: Kyonson, 11 VII 1930, J. Ohwi 2300 (LE010 06072).

Plantaginaceae

31. ***Plantago taquetii*** H. Lév., Repert. Spec. Nov. Regni Veg. 8: 283. 1910.

Isotype: Quelpaert in sylvis Yengsil 1000 m, 17 VIII 1908, Taquet 1257 (LE01009183).

Ranunculaceae

32. ***Aquilegia amurensis*** Kom., Bot. Mater. Gerb. Glavn. Bot. Sada SSSR, 6, 1: 8. 1926.

Syntype: Cham-gion, distr. Samsu, Fl. Jaludsian, vallis fl. Ankubi-muri, in rupibus ad fontes, 25 VI 1897, V.L. Komarov (LE01004138).

Lectotype (Luferov, 1995: 30): LE.

Rhamnaceae

33. ***Prunus taquetii*** H. Lév. & Vaniot, Repert. Spec. Nov. Regni Veg. 7: 197. 1909.

(=***Rhamnus taquetii*** (H. Lév. & Vaniot) H. Lév., Repert. Spec. Nov. Regni Veg. 10: 431. 1912).

Syntype: Hallaisan, 1800 m, VII 1907, U. Faurie 1890 (LE01005794).

Syntype: Quelpaert, Hallaisan, 1700 m, IX 1907, Taquet 104 (LE01005797).

Rubiaceae

34. ***Adina fauriei*** H. Lév., Repert. Spec. Nov. Regni Veg. 8: 283. 1910.

Syntype: in ripis torrentium Quelpaert prope Hongno, X 1906, U. Faurie 701 (LE01009279).

Syntype: Quelpaert in rupibus torrentium Hioton, 22 VIII 1908, Taquet 1366 (LE01009196).

35. ***Asperula platygalium*** Maxim., Bull. Acad. Imp. Sci. Saint-Pétersb. 19: 284. 1874.

Syntype: Korean Archipelago, 1863, R. Oldham 523 (LE01008903).

36. ***Hedyotis coreana*** H. Lév., Repert. Spec. Nov. Regni veg. 11: 64. 1912.

Isolectotype: Quelpaert in rupibus insulae Saiseum, 25 VIII 1908, Taquet 920 (LE01004649).

Syntype: In rupibus littoris Quelpaert, X 1906, U. Faurie 703 (LE01004650).

Lectotype (Lauener, 1973: 108): E.

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