

AN ENUMERATION OF INDIAN FLOWERING PLANTS II*

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RANUNCULACEAE (Contd.)

IV THALICTRUM Linn.

Thalictrum alpinum Linn.

Linn., Sp. Pl., 797, 1753; DC. Prodr., 1: 12, 1824; Hk. f., FBI, 1: 12, 1872; Lecoy., Monogr. *Thalic.*, 118, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 646, 1903.

Syn. *T. marginatum* Royle, Ill. 51, 1839.

Distrib.: Kashmir to Sikkim, alpine and arctic regions of Northern Hemisphere.

Thalictrum alpinum Linn. var. *microphyllum* (Royle) Hand.-Mazz.

Hand.-Mazz., Symb. Sin., 311, 1931; Kihara, Faun. & Fl. Nepal Him., 1: 131, 1955.

Distrib.: Temp. Himalayas, Tibet & China.

Thalictrum chelidonii DC.

DC., Prodr. 1: 11, 1824; Hk. f., FBI, 1: 11, 1872; Lecoy., Monogr. *Thalic.*, 103, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 608, 1903.

Distrib.: Kashmir to Sikkim and China.

Thalictrum chelidonii var. *reniforme* Hook. f. & Thoms.

SEE

T. reniforme Wall.

Thalictrum cultratum Wall. ssp. 1 *platycarpum* (Hook. f. & Thoms.) Brühl.

Brühl, *Ann. R. bot. Gdn. Calcutta*, 5: 72, 1896.

Syn. *T. platycarpum* Hook. f. & Thoms., Fl. Ind., 13, 1885; Hook. f., FBI, 1: 11, 1872.

Distrib.: Garhwal to Sikkim to alpine region & Tibet.

Thalictrum cultratum Wall. ssp. 2 *tsangense* Brühl.

Brühl, *Ann. R. bot. Gdn. Calcutta*, 5: 72, 1896.

Distrib.: North Sikkim.

Thalictrum dalzellii Hook.

Hk. Ic. Pl. t. 868, 1852; Hk. f. & Thoms., Fl. Ind., 18, 1855; Hk. f., FBI, 1: 13, 1872. Lecoy., Monogr. *Thalic.*, 137, 1885; Cooke, Fl. Bomb., 1: 4, 1893; Santapau, Fl. Purandh., 18, 1957.

Distrib.: Malabar.

Thalictrum elatum Jacq.

SEE

T. minus var. 1. *elatum* (Jacq.) Lecoy.

Thalictrum elegans Wall. ex Royle.

Wall. ex Royle, Ill., 51, 1839; Hk. f. & Thoms., Fl. Ind., 13, 1855; Hk. f., FBI, 1: 10, 1872; Lecoy., Monogr. *Thalic.*, 102, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 623, 1903.

Distrib.: Subalpine Himalaya.

Thalictrum falconeri Lecoy.

SEE

T. foliolosum DC.

Thalictrum foetidum Linn.

Linn., Sp. Pl. 768, 1753; Lecoy., Monogr. *Thalic.*, 106, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 618, 1903.

Syn. *T. minus* var. *foetidum* Hook. f. FBI, 1: 14, 1872; *T. vaginatum* Royle, Ill., 52, 1839.

Distrib.: N. W. Himalaya.

Thalictrum foliolosum DC.

DC., Syst., 1: 175, 1818; Don., Prodr., 192, 1825; Royle, Ill., 51, 1839; Hk. f. & Thoms., Fl. Ind., 16, 1855; Hk. f., FBI, 1: 14, 1872; Lecoy., Monogr. *Thalic.*, 115, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 619, 1903.

Syn. *T. falconeri* Lecoy., *Bull. bot. Soc. Belg.*, 24: 192, 1885, & Monogr. *Thalic.*, 117, 1885.

Distrib.: Temp. Himalaya from Kashmir to Sikkim and Khasi hills.

Thalictrum glyphocarpum Wight & Arn.

SEE

T. javanicum Blume

Thalictrum javanicum Blume

Bl., Bidjd. 2, 1825; Hk. f., FBI, 1: 13, 1872; Lecoy., Monogr. *Thalic.*, 92, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 611, 1903; Gamble, Fl. Madras, 1: 3, 1915.

Syn. *T. glyphocarpum* Wight & Arn. Prodr., 2, 1834.

Distrib.: N. W. Himalaya to Assam, Parasnath, & hills of S. India above 1500 m.

Thalictrum macrostigma Edgew.

SEE

T. pauciflorum Royle

* Continued from Bobsi 1(1):41, 1959.

It is proposed to have cards printed for all the binomials noted in this paper. For that purpose slight deviation in the arrangement has been made here from the previous issue.

Thalictrum majus Jacq.

SEE

T. minus var. *2 majus* (Jacq.) Hook. f. & Thoms.*Thalictrum marginatum* Royle

SEE

Thalictrum alpinum Linn.*Thalictrum maxwellii* Royle

SEE

T. minus var. *majus* (Jacq.) Hook. f. & Thoms.*Thalictrum minus* Linn.

Linn. Sp. Pl., 769, 1753; DC. Prodr., 1:13, 1824; Hk. f. & Thoms., Fl. Ind., 16, 1855; Hk. f., FBI, 1:14, 1872; Lecoy., Monogr., *Thalic.*, 124, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:620, 1903.

The typical species has not yet been reported from India.

Thalictrum minus var. *1. elatum* (Jacq.) Lecoy.

Lecoy., *Bull. bot. Soc. Belg.*, 24:202, 1885; & Monogr., *Thalic.*, 127, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:620, 1903.

Syn. *T. elatum* Jacq., Hort. Vindob., 3:49, 1777; *T. minus* var. *vulgare* Hook. f. & Thoms., Fl. Ind., 17, 1885; Hk. f., FBI, 1:14, 1872.

Distrib.: Kashmir, Europe, N. Asia & Tibet.

Thalictrum minus var. *foetidum* Hook. f.

SEE

T. foetidum Linn.*Thalictrum minus* var. *2 majus* (Jacq.) Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind., 17, 1885; Hk. f., FBI, 1:14, 1872.

Syn. *T. majus* Jacq. Fl. Austr., 5:9, t 430, 1778; *T. nanum* Schlich., Cat. Pl. Helvet., 35, 1821; *T. maxwellii* Royle, Ill. 52, 1839; *T. minus* var. *nanum* (Schl.) Lecoy., *Bull. bot. Soc. Belg.*, 24:203, 1885; & Monogr. *Thalic.*, 127, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:621, 1903.

Distrib.: N. W. Himalayas.

Thalictrum minus var. *nanum* (Schl.) Lecoy.

SEE

T. minus var. *2 majus* (Jacq.) Hook. f. & Thoms.*Thalictrum minus* var. *vulgare* Hook. f.

SEE

T. minus var. *1. elatum* (Jacq.) Lecoy.*Thalictrum nanum* Schlich.

SEE

T. minus var. *2 majus* (Jacq.) Hook. f. & Thoms.*Thalictrum neurocarpum* Royle

SEE

T. reniforme Wall.*Thalictrum obovatum* Blatter

Blatter, *J. Asiat. Soc. Beng. (N.S.)*, 26:339, 1931.
Distrib.: W. India.

Thalictrum pauciflorum Royle.

Royle, Ill. 52, 1839; Hk. f. & Thoms., Fl. Ind. 14, 1855; Hk. f., FBI, 1:11, 1872; Lecoy., Monogr. *Thalic.*, 105, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:625, 1903.

Syn. *T. macrostigma* & *T. secundum* Edgew. Trans. Linn. Soc., 20:27, 1851.

Distrib.: W. Himalayas in temperate regions.

Thalictrum pedunculatum Edgew.

Edgew. Trans. Linn. Soc., 20:27, 1851; Hk. f. & Thoms. Fl. Ind., 15, 1855; Hk. f., FBI, 1:12, 1872; Lecoy., Monogr. *Thalic.*, 155, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:608, 1903.

Distrib.: W. Himalayas in temperate regions.

Thalictrum platycarpum Hook. f. & Thoms.

SEE

T. cultratum Wall. ssp. *1 platycarpum* (Hook. f. & Thoms.) Brühl

Thalictrum punduanum Wall.

Wall., Pl. As. Rar., 2:26, 1831; Hk. f. & Thoms., Fl. Ind., 18, 1855; Hk. f., FBI, 1:12, 1872; Lecoy., Monogr. *Thalic.*, 142, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50:612, 1903 (in part).

Syn. *T. punduanum* var. *glaucum* Hook. f. & Thoms. Hk. f., FBI, 1:13, 1872.

Distrib.: Temperate Himalaya, Assam.

Thalictrum punduanum Wall. var. *glandulosum* Hook. f. & Thoms.

Syn. *Thalictrum rufum* Lecoy., Monogr. *Thalic.*, 143, 1885.

Distrib.: Assam.

Thalictrum radiatum Royle

SEE

T. saniculaeforme DC.*Thalictrum reniforme* Wall.

Wall., Pl. As. Rar. 2:26, 1831; Hk. f., FBI, 1:11, 1872; Lecoy., Monogr. *Thalic.*, 112, 1885.

Syn. *T. neurocarpum* Royle, Ill., 51, 1839; *T. chelidonii* var. *reniforme* Hook. f. & Thoms., Fl. Ind., 13, 1855.

Distrib.: Temp. Himalaya from Kashmir to Sikkim.

Thalictrum rostellatum Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind., 13, 1855; Hk. f., FBI, 1: 12, 1872; Lecoy., Monogr. *Thalic.*, 154, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 614, 1903.

Distrib.: Temp. Himalaya from Simla to Sikkim.

Thalictrum rotundifolium DC.

DC., Syst., 1: 185, 1818; Don., Prod. Fl. Nep., 193, 1825; Wall., Pl. As. Rat., 3: 41, 1832; Hk. f. & Thoms., Fl. Ind., 19, 1855; Hk. f., FBI, 1: 13, 1872; Lecoy., Monogr. *Thalic.*, 139, 1885; Finet et Gagnep., *Bull. Soc. bot. Fr.*, 50: 616, 1903.

Distrib.: Nepal.

Thalictrum rutaefolium Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind., 14, 1855; Hk. f., FBI, 1: 12, 1872; Lecoy., Monogr. *Thalic.*, 120, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 606, 1903.

Distrib.: Sikkim, Tibet, China.

Thalictrum saniculaeforme DC.

DC., Prodr. 1: 12, 1824; Hk. f. & Thoms., Fl. Ind., 15, 1855; Hk. f., FBI, 1: 13, 1872; Lecoy., Monogr. *Thalic.*, 140, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 611, 1903; Gamble, Fl. Madras, 1: 3, 1915.

Syn. *T. radiatum* Royle, Ill., 52, 1829.

Distrib.: Temperate Himalaya, Simla to Sikkim; S. India in Nilgiri Hills and Mysore.

Thalictrum vaginatum Royle

SEE

T. foetidum Linn.

Thalictrum virgatum Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind., 14, 1855; Hk. f., FBI, 1: 12, 1872; Lecoy. Monogr. *Thalic.*, 114, 1885; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 615, 1903.

Distrib.: E. Himalaya.

V **CALLIANTHEMUM** Mey.**Callianthemum cachemirianum** Cam.

SEE

C. pimpinelloides (Don ex Royle) Hook. f. & Thoms.

Callianthemum endlicheri Wall.

SEE

Oxygraphis polypetalum Hook. f. & Thoms.

Callianthemum pimpinelloides (Don ex Royle) Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind. 26, 1855.

Syn. *C. cachemirianum* Cam., Jacq. Voy. Descr. Collec. Bot. 5, t. 3. 1844; Hk. f., FBI, 1: 14. 1872;

Ranunculus pimpinelloides Don ex Royle, Ill., 53, 1939.

Distrib.: Temperate and alpine Himalaya from Kashmir to Sikkim; China.

VI **ADONIS** Dill. ex Linn.**Adonis aestivalis** Linn.

Linn., Sp. Pl., 771, 1753; Boiss., Fl. Or., 1: 17, 1867; DC., Prodr., 1: 24, 1824; Hk. f. & Thoms., Fl. Ind., 25, 1855; Hk. f., FBI, 1: 15, 1872; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 133, 1903.

Syn. *A. parviflora* Fisch. ex DC., Prodr., 1: 24, 1824; *A. microcarpa* DC., Syst., 1: 223, 1818. *A. inglisii* Royle, Ill., 53, 1839.

Distrib.: W. Himalaya, Temp. Asia and Europe.

Adonis aestivalis var. 1. *scrobiculata* (Boiss.) Finet & Gagnep.

Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 133, 1903.

Syn. *A. scrobiculata* Boiss., *Diag.*, 2(1):6, 1849; et Fl. Or., 1: 17, 1867; Hk. f., FBI, 1: 15, 1872.

Distrib.: Kistwar; Persia, Afghanistan.

Adonis aestivalis var. 2. *squarrosa* (Stev.) Boiss.

Boiss., Fl. Or., 1: 18, 1867; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 133, 1903.

Syn. *A. squarrosa* Stev. in *Bull. Soc. Nat. Mosc.*, 2: 272, 1848.

Distrib.: Kashmir.

Adonis chrysocalyx Prantl.

SEE

A. chrysocyathus Hook. f.

Adonis chrysocyathus Hook. f. et Thoms.

Hk. f., FBI, 1: 15, 1872; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 50: 132, 1903.

Syn. *A. contorta* Jacq. ex Franch., *Bull. Soc. Philom.* 8(6):85, 1894; *A. chrysocalyx* Prantl., Eng. & Prantl., *Pflanzenf.*, 3: 2; 66, 1891.

Distrib.: W. Himalaya, W. Tibet.

Adonis contorta Jacq. ex. Franch.

SEE

A. chrysocyathus Hook. f.

Adonis inglisii Royle

SEE

A. aestivalis Linn.

Adonis microcarpa DC.

SEE

A. aestivalis Linn.

Adonis parviflora Fisch. ex DC.

SEE

A. aestivalis Linn.

Adonis scrobiculata Boiss.

SEE

A. aestivalis var. *scrobiculata* (Boiss.) Finet & Gagnep.

Adonis squarrosa Stev.

SEE

A. aestivalis var. *squarrosa* (Stev.) Boiss.

VII RANUNCULUS Linn.

Ranunculus adoxifolius Hand.-Mazz.

Hand.-Mazz. *Acta Horti Gotoburg.*, **13** : 159, 1939.

Distrib. : Sikkim.

Ranunculus affinis Hook. f. non R. Br.

SEE

R. brotherusi Freyn. var. *dasycarpus* (Maxim.) Hand.-Mazz.

Ranunculus affinis R. Br. var. *flabellatus* Franch.

SEE

R. felixii Levl.

Ranunculus affinis R. Br. var. *tanguticus* f. *dasycarpus* Maxim.

SEE

R. brotherusi Freyn. var. *dasycarpus* (Maxim.) Hand.-Mazz.

Ranunculus affinis R. Br. var. *stracheyanus* Maxim.

SEE

R. pulchellus Mey var. *stracheyanus* (Maxim.) Hand.-Mazz.

Ranunculus aquatilis Linn.

Linn., Sp. Pl., 781, 1753 ; Hk. f., FBI., **1** : 16, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **5** : 321, 1904.

Syn. *R. flaccidus* Persoon. Usteri, *Ann. Bot.*, **14**, 39, 1795.

Ranunculus aquatilis var. *trichophyllus* Hook. f. & Thoms.

Hk. f., FBI., **1** : 16, 1872.

Distrib. : Punjab in the plains and at lower elevations in the hills, Kumaon, Kashmir, Tibet, W. Pakistan.

Ranunculus arvensis Linn.

Linn., Sp. Pl., 780, 1753 ; DC. Syst., **1** : 297, 1818 ; et Prodr., **1** : 41, 1824 ; Royle, Ill., **53** : 1939 ; Hk. f. & Thoms., Fl. Ind., **39**, 1855 ; Hk. f., FBI., **1** : 20, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 301, 1904.

Syn. *R. tuberculatus* DC., Prodr., **1** : 41, 1842.

Distrib. : Kumaon to Kashmir ; Afghanistan to Asia Minor, W. Siberia, Europe.

Ranunculus attenuatus Royle

SEE

R. hirtellus Royle.

Ranunculus aucheri Boiss.

Boiss., Ann. Sc. Nat. 351, 1841 ; et Fl. Or., **1** : 34, 1867.

Syn. *R. elbrusensis* Boiss., Fl. Or., **1** : 34, 1867.

Distrib. : Kashmir ; Ladak, Afghanistan, Persia.

Ranunculus brotherusi Freyn.

Freyn, *Bull. Herb. Boiss.*, **6** : 885, 1898 ; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 148, 1939.

Syn. *R. caespitosus* Wall. Ex. Hook. f. & Thoms., Fl. Ind., **33**, 1855 ; *R. dissectus* Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 310, 1904, (non M. Bieb.) ; *R. tanguticus* (Max.) Ovcz. Komarov, Fl. U.R.S.S., **7** : 393, 1937.

Distrib. : Kashmir to Sikkim, Tibet, China.

Ranunculus brotherusi var. *dasycarpus* (Maxim.) Hand.-Mazz.

Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 149, 1939.

Syn. *R. affinis* Hook. f., FBI., **1** : 18, 1872 ; (pp. non R. Br.) ; *R. affinis* var. *tanguticus* f. *dasycarpus* Maxim., Fl. Tang., **14**, 1889.

Distrib. : Sikkim ; Tibet, China.

Ranunculus cabulicus Boiss.

SEE

R. muricatus Linn.

Ranunculus caespitosus Wall. ex Hook. f. & Thoms.

SEE

R. brotherusi Freyn.

Ranunculus cantoniensis DC.

DC., Prodr., **1** : 43, 1924 ; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 165, 1940.

Syn. *R. pensylvanicus* Hook. f. & Thoms., Hk. f., FBI., **1** : 19, 1872. non L.f. ; *Hecatonia pilosa* Lour., Fl. Cochinchina, 371, 1790.

Distrib. : Upper Gangetic Plain, Punjab, Himalayas and Assam upto 2,000 mtr., China, Indo-China.

Ranunculus cassius Finet et Gagnep.

SEE

R. laetus Wall. ex Royle

Ranunculus chaerophyllos Linn.

Linn., Sp. Pl. 780, 1753 ; DC., Syst., **1** : 254, 1818 ; et Prodr., **1** : 27, 1824 ; Hk. f. & Thoms., Fl. Ind., **33**, 1855 ; Hk. f., FBI., **1** : 18, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 298, 1904.

Distrib. : Kashmir, Persia, Asia minor, S. Europe.

Ranunculus choorensis Royle.

SEE

R. hirtellus Royle.

Ranunculus dielsianus Ulbr.

Ulbr., Bot. Jahrb., **47** : 621, 1913.

Ranunculus dielsianus var. *suprasericeus* Hand.-Mazz.

Hand-Mazz. *Symb. Sin.*, **7** : 299, 1931 ; et *Acta Horti Gotoburg.*, **13** : 144, 1939.

Syn. *R. hirtellus* Franch., Pl. Delev., **21**, 1889 ; (non Royle)

Distrib. : Sikkim, China.

Ranunculus diffusus DC.

DC., Prod., **1** : 38, 1824 ; Hk., f., FBI., **1** : 19, 1872 ; p.p. ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 308, 1904.

Distrib. : Punjab, to Bhootan, N. Burma.

Ranunculus diffusus Hook. f. pp. (non DC.)

SEE

R. subpinnatus Wight & Arn.

Ranunculus dissectus Finet & Gagnep.

SEE

R. brotherusi Freyn.

Ranunculus distans Royle

SEE

R. laetus Wall.

Ranunculus elbrusensis Boiss.

SEE

R. aucheri Boiss.

Ranunculus falcatus Linn.

Linn., Sp. Pl., 781, 1753 ; Hk. f., FBI., **1** : 16, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 295, 1904.

Syn. *Anemone cynosurus* Griff., Notul., **4** : 735, 1851.

Distrib. : Punjab & Kashmir ; W. & C. Asia ; Siberia.

Ranunculus felixii Levl.

Levl., Fedde. Rep., **12** : 281, 1913 ; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 142, 1939.

Syn. *R. affinis* R. Br. var. *flabellatus* Franch., Pl. Delv., **19**, 1889 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 315, 1904.

Distrib. : Kashmir, Sikkim, China.

Ranunculus flaccidus Persoon

SEE

R. aquatilis Linn.

Ranunculus flamula Don.

SEE

R. pulchellus Mey.

Ranunculus glabratus Royle

SEE

R. hirtellus Royle

Ranunculus hirtellus Franch. non Royle

SEE

R. dielsianus Ulbr. var. *suprasericeus* Hand.-Mazz.

Ranunculus hirtellus Royle

Royle, Ill., 53, 1839 ; Hk. f. & Thoms., Fl. Ind., 34, 1855 ; Hk. f. FBI., **1** : 18, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 319, 1904 ; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 151, 1939.

Syn. *R. attenuatus* Royle ; *R. nervosus* Royle ; *R. Choorensis* Royle, and *R. glabratus* Royle, Ill. 53, 1839 ; *R. nivalis* Hook. f. & Thoms., Fl. Ind. 35, 1855 (non Linn.).

Distrib. : W. Himalayas upto 4500 mtr., Sikkim, Tibet, China.

Ranunculus hyperboreus Rottb.

Rottb., Skriff. Kjoeb. Selsk., **10** : 458, 1770 ; DC., Syst., **1** : 272, 1818 ; Hk. f., FBI., **1** : 18, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 320, 1904.

Distrib. : Kashmir to Sikkim, N. Asia, Europe.

Ranunculus hyperboreus var. *natans* Regel.

Hk. f., FBI., **1** : 18, 1872 ; Finet et Gagnep., *Bull. Soc. bot. Fr.*, **51** : 320, 1904.

Syn. *R. hyperboreus* var. *multifidus* Hook. f. & Thoms. Hook. f., FBI., **1** : 18, 1872 (non *R. multifidus* Pursh).

Distrib. : Temp. Himalaya, Central and Northern Asia.

Ranunculus hyperboreus Rottb. var. *radicans* Hook. f. & Thoms.

SEE

R. radicans Mey.

Ranunculus indicus Roxb.

SEE

R. sceleratus L.

Ranunculus laetus Wall. ex Royle

Royle, Ill., 53, 1839 ; Hk. f. & Thoms., Fl. Ind., 36, 1855 ; Hk. f., FBI., **1** : 19, 1872 ; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 164, 1940.

Syn. *R. distans* Royle, Ill. 53, 1839 ; *R. cassius* Finet & Gagnep. *Bull. Soc. bot. Fr.*, **51** : 305, 1904 p.p. non Boiss.

Distrib. : Temp. Himalaya from Kashmir to Sikkim, Afghanistan, Tibet, China.

Ranunculus lingua Linn.

Linn., Sp. Pl., 773, 1753 ; DC., Prod., **1** : 32, 1824 ; Hk. f. & Thoms. Fl. Ind., 30, 1855 ; Hk. f., FBI. **1** : 16,

1872; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 303, 1904.

Distrib.: Kashmir, N. Asia.

Ranunculus lobatus Jacq. ex Camb.

Jacq., *Voy. Descr. Collect. Bot.*, **5** : t. 1B, 1844; Hk. f. & Thoms., *Fl. Ind.*, 31, 1855; Hk. f., *FBI.*, **1** : 17, 1872; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 312, 1951.

Syn. *R. salsuginosus* Don ex Royle, *Ill.*, 53, 1839.

Distrib.: Kashmir to Sikkim upto 5000 mtr., Tibet.

Ranunculus meinshouseni Schrank.

Schrank., *Bull. Phys. Math. Acad. Petersb.*, **3** : 309, 1845.

Distrib.: Punjab 2500 mtr., Soongaria.

Ranunculus membranaceus Royle

SEE

R. pulchellus Mey var. *membranaceus* (Royle) Mukerjee.

Ranunculus munroanus Drumm. ex Dunn.

Dunn., *Kew Bull.*, 279, 1925.

Distrib.: Kashmir 3000 to 4000 mtr., W. Tibet.

Ranunculus muricatus Linn.

Linn., *Sp. Pl.*, 780, 1753; DC., *Syst.*, **1** : 298, 1818; DC., *Prodr.* **1** : 42, 1824; Hk. f. & Thoms., *Fl. Ind.*, 39, 1855; Hk. f., *FBI.*, **1** : 20, 1872; Finet & Gagnep., *Bull. Soc. bot. Fr.*, **51** : 301, 1904.

Syn. *R. cabulicus* Boiss., *Diag.*, **2** : 9, 1854.

Distrib.: Punjab up to 1000 mtr. in the hills, W. Asia, Europe, America.

Ranunculus nephelogenes Edgew.

SEE

R. pulchellus Mey.

Ranunculus nervosus Royle

SEE

R. hirtellus Royle

Ranunculus nivalis Hook. f. & Thoms. (non Linn.).

SEE

R. sikkimensis Hand.-Mazz.

Ranunculus pensylvanicus Hook. f. & Thoms. (non Linn. f.).

SEE

R. cantoniensis DC.

Ranunculus pimpinelloides Don ex Royle

SEE

Callianthemum pimpinelloides (Don ex Royle) Hook. f. & Thoms.

Ranunculus polypetalus Royle.

SEE

Oxygraphis polypetala Hook. f. & Thoms.

Ranunculus potanini Komar.

SEE

R. pulchellus Mey. var. *potanini* (komar.) Hand.-Mazz.

Ranunculus pulchellus Mey.

C. A. Mey., *Led. Fl. Alt.*, **11** : 333, 1830; Hk. f. & Thoms., *Fl. Ind.*, 31, 1855; Hk. f., *FBI.*, **1** : 17, 1872; Finet et Gagnep., *Bull. Soc. bot. Fr.*, **51** : 313, 1904; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 146, 1940.

Syn. *R. nephelogenes* Edgw., *Trans. Linn. Soc.*, **20** : 28, 1846. *R. salsuginosus* Wall., *Cat.* (non Don); *R. flamula* Don, Royle, *Ill.*, 53, 1839, (non-Linn.).

Distrib.: Alpine Himalaya; Tibet, Afghanistan, Central and North Asia.

Ranunculus pulchellus var. 1. *potanini* (Komar.) Hand.-Mazz.

Hand.-Mazz. *Acta Horti Gotoburg.*, **13** : 147, 1940.

Syn. *R. potanini* Komar., *Rep. Sp. Nov.* **9** : 392, 1911.

Distrib.: Sikkim, Tibet, Central Asia.

Ranunculus pulchellus var. 2. *membranaceus* (Royle) Mukerjee, *Comb. Nov.*

Syn. *R. pulchellus* var. *sericeus* Hook. f. & Thoms., Hk. f., *FBI.*, **1** : 17, 1872; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 146, 1940.

Basi. *R. membranaceus* Royle, *Ill.*, 53, 1854.

Distrib.: Inner ranges of alpine Himalaya; Tibet, Central Asia.

R. pulchellus Mey. var. *sericeus* Hook. f. & Thoms.

SEE

R. pulchellus Mey. var. *membranaceus* (Royle) Mukerjee

Ranunculus pulchellus var. 3. *strachyanus* (Maxim.) Hand.-Mazz.

Hand.-Mazz. *Acta Horti Gotoburg.* **13** : 147, 1940.

Syn. *R. affinis* R. Br. var. *stracheyanus* Maxim., *Fl. Tang.*, 14, Fig. 4: 1-8, 1889.

Distrib.: Sikkim, Kashmir, Tibet, China.

Ranunculus radicans Mey.

C. A. Mey., *Ledeb. Fl. Alt.* **2** : 316, 1830; Hk. f. & Thoms., *Fl. Ind.* **32**, 1855; Hand.-Mazz., *Acta Horti Gotoburg.*, **13** : 141, 1940.

Syn. *R. hyperboreus* Rottb. var. *radicans* Hook. f. & Thoms. f., *FBI.*, **1** : 18, 1872.

Distrib.: Alpine Himalaya, Central and Northern Asia.

Ranunculus reniformis Wall. ex Wight & Arn.

W. & A., Prodr. Fl. Ind. Or. 3, 1834; Hk. f. & Thoms., Fl. Ind., 30, 1855; Hk. f., FBI., 1:16, 1872; Finet & Gagnep., Bull. Soc. bot. Fr., 51:316, 1904; Gamble, Fl. Madras 1:4, 1935.

Distrib.: Hills of S. India.

Ranunculus salsuginosus Don ex Royle

SEE

R. lobatus Jacq. ex Comb.

Ranunculus salsuginosus Wall. non Don ex Royle.

SEE

R. pulchellus Mey.

Ranunculus sceleratus Linn.

Linn., Sp. Pl., 776, 1753; DC., Syst., 1:268, 1818; et Prodr. 1:34, 1824; Don., Prodr. Fl. Nep., 195, 1825; Royle, Ill., 53, 1839; Hk. f., FBI., 1:19, 1872; Finet & Gagnep., Bull. Soc. bot. Fr., 51:316, 1904; Hand.-Mazz., Acta Horti Gotoburg., 13:162, 1940.

Syn. *R. indicus* Roxb., Fl. Ind., 2:671, 1831; *Hecatonia palustris* Lour., Fl. Coch., 303, 1790.

Distrib.: Plains of N. India and at lower elevations in the hills; Asia in general and excepting the tropical region.

Ranunculus sikkimensis Hand.-Mazz.

Hand.-Mazz., Acta Horti Gotoburg., 13:155, 1940.

Syn. *R. nivalis* Hook. f., FBI., 1:19, 1872 (non-Linn.).

Distrib.: Sikkim, China.

Ranunculus subpinnatus Wight & Arn.

W. & A., Prodr. Fl. Ind. Or., 4:1834; Finet & Gagnep., Bull. Soc. bot. Fr., 51:310, 1904; Gamble, Fl. Madras, 1:4, 1935.

Syn. *R. diffusus* Hook. f., FBI., 1:19, 1872 (pp. non DC.).

Distrib.: S. India in the hills.

Ranunculus tanguticus (Max.) Ovez.

SEE

R. brotherusi Freyn.

Ranunculus tuberculatus DC.

SEE

R. arvensis Linn.

Ranunculus wallichianus Wight & Arn.

W. & A., Prodr. Fl. Ind. Or., 4:1834; Hk. f. & Thoms., Fl. Ind., 38, 1855; Hk. f., FBI., 1:20, 1872; Finet & Gagnep., Bull. Soc. bot. Fr., 51:301, 1904; Gamble, Fl. Madras, 1:4, 1935.

Distrib.: S. India, Ceylon.

VIII OXYGRAPHIS Bunge.

Oxygraphis glacialis Bunge.

Bunge, En. Pl. Alt. 35, 1832; Hk. f. & Thoms., Fl. Ind., 27, 1855; Hk. f., FBI., 1:21, 1872; Prantl., Eng. Bot. Jahrb., 9:263, 1888; Finet et Gagnep., Bull. Soc. bot. Fr., 51:328, 1904; Hand.-Mazz., Acta Horti Gotoburg., 13:134, 1940.

Distrib.: Alpine Himalaya, Kumaon to Sikkim.

Oxygraphis polypetala Hook. f. & Thoms.

Hk. f. & Thoms., Fl. Ind., 27, 1855; Hk. f., FBI., 1:21, 1872; Prantl., Eng. Bot. Jahrb., 9:263, 1888; Finet & Gagnep., Bull. Soc. bot. Fr., 51:328, 1904.

Syn. *Ranunculus polypetalus* Royle, Ill., 54, 1839; *Callianthemum endlicheri* Walp., Rep., 1:33, 1842.

Distrib.: Alpine W. Himalaya; Tibet.

IX CALTHA Linn.

Caltha elata Duthie

Duthie, Gard. Chron., 37:178, 1905.

Distrib.: N. W. Himalaya, W. Tibet.

Caltha govaniana Wall. ex Royle

SEE

C. palustris Linn.

Caltha himalensis Don.

SEE

C. palustris Linn. var. *himalensis* (Don) Mukerjee.

Caltha palustris Linn.

Linn., Sp. Pl., 558, 1753; Hk. f. & Thoms., Fl. Ind., 40, 1855; Hk. f., FBI., 1:21, 1872; Finet & Gagnep., Bull. Soc. bot. Fr., 51:289, 1904; Hand.-Mazz., Acta Horti Gotoburg., 13:42, 1940.

Syn. *C. govaniana* Wall. ex Royle., Ill., 54, 1839.

Distrib.: Temperate Himalaya; N. Asia, Europe, N. America.

Caltha palustris var. 1. *himalensis* (Don) Mukerjee, Comb. Nov.

Basi. *C. himalensis* Don., Prodr., 195, 1825; Royle., Ill., 54, 1839.

Syn. *C. paniculata* Wall., Cat. 4711 nomen nudum.

Distrib.: Temperate Himalaya.

Caltha palustris var. 2. *alba* (Jacq. ex Camb.) Hook. f. & Thoms.

Hk. f., FBI., 1:21, 1872.

Distrib.: N. W. Himalaya; Afghanistan.

Caltha paniculata Wall.

SEE

C. palustris L. var. *himalensis* (Don) Mukerjee.

***Caltha scaposa* Hook. f. & Thoms.**

Hk. f. & Thoms., Fl. Ind., 40, 1855 ; Hk. f., FBI., 1 : 21, 1872 ; Hand.-Mazz., *Acta Horti Gotoburg.*, 13 : 43, 1940.

Syn. *C. palustris* var. *scaposa* Maxim. ex Finet et Gagnep., *Bull. Soc. bot. Fr.*, 51 : 390, 1904.

Distrib. : Sikkim, Tibet, China.

X CALTHODES Hook. f. & Thoms.***Calthodes palmata* Hook. f. & Thoms.**

Hk. f. & Thoms., Fl. Ind., 41, 1855 ; Hk. f., FBI., 1 : 22, 1872.

Distrib. : Sikkim, Bhootan, Tibet, China.

XI TROLLIUS Linn.***Trollius acaulis* Lindl.**

Lindl., Bot. Reg., 1842 ; Hk. f. & Thoms., Fl. Ind., 41, 1855 ; Hk. f., FBI., 1 : 22, 1872.

Syn. *T. pumilus* Royle, Ill., 54, 1839 (non Don.).

Distrib. : Kumaon to Kashmir.

***Trollius bhotanica* (King ex Brühl) Mukerjee, Comb. nov.**

Basi. *T. pumilus* ssp. *normalis* var. *bhotanica* King ex Brühl, *Ann. R. bot. Gdn. Cal.*, 5 : 88, 1896.

Distrib. : E. Himalaya.

***Trollius farreri* Stapf.**

SEE

***T. kansuensis* (Brühl) Mukerjee**

***Trollius gammieanus* Stapf.**

SEE

***T. geranifolius* (Brühl) Mukerjee.**

***Trollius geranifolius* (Brühl) Mukerjee. Comb. nov.**

Basi. *T. pumilus* ssp. *geranifolius* Brühl. *Ann. R. bot. Gd. Cal.*, 5 : 88, 1896.

Syn. *T. gammieanus* Stapf., Bot. Mag., 152 : t. 9143, 1926 in calvi.

Distrib. : Sikkim.

***Trollius kansuensis* (Brühl) Mukerjee. Comb. Nov.**

Basi. *T. pumilus* ssp. *normalis* var. *kansuensis* Brühl, *Ann. R. bot. Gdn. Cal.*, 5 : 88, 1896.

Syn. *T. pumilus* ssp. *normalis* var. *tangutica* Brühl, *Ann. R. bot. Gdn. Cal.*, 5 : 88, 1896 ; *T. farreri* Stapf, Bot. Mag., 152 : t. 9143, 1928 in clavi : Hand.-Mazz., *Acta Horti Gotoburg.*, 13 : 41, 1940.

Distrib. : Assam (Delei valley) ; China.

***Trollius pumilus* Don.**

Don., Prod., 195, 1825 ; Hk. f. & Thoms., Fl. Ind., 41, 1855 ; Hk. f. FBI., 1 : 22, 1872 ; Hand.-Mazz., *Acta Horti Gotoburg.*, 13 : 41, 1940.

Syn. *T. pumilus* ssp. *normalis* var. *sikkimensis* Brühl. *Ann. R. bot. Gdn. Cal.*, 5 : 88, 1896 ; *T. patulus* var. *genuinus* Finet. & Gagnep., *Bull. Soc. bot. Fr.*, 51 : 395, 1904.

Distrib. : Alpine Himalaya ; China.

XII COPTIS Salisb.***Coptis ospricarpa* Brühl.**

Ann. R. bot. Gdn. Cal., 5 : 89, 1896.

Distrib. : Sikkim.

***Coptis teeta* Wall.**

Wall., Trans. Med. & Phys. Soc., 8 : 87, 1836 ; Hk. f. & Thoms., Fl. Ind. 42, 1855 ; Griffith., Icon. Pl. Asiat., 4 : t. 660, 1854 ; Hk. f., FBI., 1 : 23, 1872 ; Finet et Gagnep., *Bull. Soc. bot. Fr.*, 51 : 401, 1904.

Distrib. : N. Assam.

XIII ISOPYRUM Linn.***Isopyrum adiantifolium* Hook. f. & Thoms.**

Hk. f. & Thoms., Fl. Ind., 42, 1855 ; Hk. f., FBI., 1 : 23, 1872 ; Finet & Gagnep., *Bull. Soc. bot. Fr.*, 51 : 406, 1906 ; Drum. et Hutchin., *Kew Bull.*, 156, 1920.

Distrib. : Sikkim, Upper Burma.

***Isopyrum anemonoides* Kar. & Kir.**

SEE

***Paraquilegia uniflora* (Aitch. & Hemsl.) Drum. & Hutch.**

***Isopyrum caespitosum* Boiss. & Hoh.**

SEE

***Paraquilegia caespitosa* (Boiss.) Drum. et Hutch.**

***Isopyrum grandiflorum* Fisch. ex DC.**

SEE

***Paraquilegia grandiflora* (Fisch. ex DC.) Drum. & Hutch.**

***Isopyrum grandiflorum* Hook. f. in part (non Fisch. ex DC.).**

SEE

***Paraquilegia microphylla* (Royle) Drum. & Hutch.**

***Isopyrum microphyllum* Royle.**

SEE

***Paraquilegia microphylla* (Royle) Drum. & Hutch.**

Isopyrum thalictroides Hook. f. & Thoms.

SEE

Paraquilegia uniflora (Aitch. & Hemsl.) Drum. & Hemsl.

XIV PARAQUILEGIA Drum. et Hutchins.

Paraquilegia caespitosa (Boiss.) Drum. & Hutchins.

Drum. & Hutchins., *Kew Bull.*, 158, 1920.

Syn. *Isopyrum caespitosum* Boiss. et Hoh., *Diagn. Ser.*, 1(8):7, 1849 ; Boiss., *Fl. Or.*, 1 : 64, 1867.

Distrib.: Kashmir ; Afghanistan, Persia, Turkistan.

Paraquilegia grandiflora (Fisch. ex DC.) Drum. & Hutchins.

Drum. & Hutchins., *Kew Bull.*, 156, 1920.

Syn. *Isopyrum grandiflorum* Fisch. ex DC., *Prodr.*, 1 : 48, 1824 ; Ill., 54, t. 1f, 3, 1839 ; Hk. f. & Thoms., *Fl. Ind.* 43, 1855 ; Hk. f. *FBI.*, 1 : 23, 1872.

Distrib.: N. W. Himalaya ; Central Asia.

Paraquilegia microphylla (Royle) Drum. & Hutchins.

Drum. & Hutchins., *Kew Bull.*, 157, 1920.

Syn. *Isopyrum microphyllum* Royle, Ill., 54, t. 1f, 4, 1839 ; *I. grandiflorum* Hook. f., *FBI.*, 1 : 23, 1872 (in part).

Distrib.: Temp. Himalaya from Hazara to Sikkim ; Tibet, Central Asia.

Paraquilegia uniflora (Aitch. & Hemsl.) Drum. & Hutchins.

Drum. & Hutchins., *Kew Bull.* 158, 1920.

Syn. *Isopyrum uniflorum* Aitch. & Hemsl., *J. Linn. Soc.*, 19 : 149, 1875 ; *I. anemonoides* Kar. & Kir., *Enum. Pl. Songor.* No. 55, 1842 (non Willd.) ; *I. thalictroides* Hk. f. & Thoms., *Fl. Ind.*, 43, 1855 (non Linn.) ; Hk. f., *FBI.*, 1 : 23, 1872.

Distrib.: N. W. Himalaya ; Afghanistan, Central Asia.

[To be continued]