

obtuse lobes, the middle one larger than the lateral ones. Disc-florets several, ♀ yellow, 0.3-0.32 (-0.35) cm long. Corolla funnel shaped, tube 0.02 cm long, hairy outside, limb 0.13 cm long, 5-toothed, hairy on the apices of teeth. Achenes turbinate, black, those of the ray-florets dorsally compressed and curved, those of the disc-florets 4(-5) angled, pubescent, with truncate apex; pappus of 16-20 rigid, lanceolate, whitish, aristate, fimbriate, persistent, 0.1-0.15 cm long scales. Receptacle conical, paleaceous. outermost pales oblong-spathulate, obtuse, scarious-margined 0.25-0.3 cm long, inner ones scarious, lanceolate-oblong, sub-acute, 0.3-0.35 cm long.

Flowers & fruits: Greater part of the year.

Specimens examined: UTTAR PRADESH: Dehra Dun. Rispana, C. R. Babu 34926 (BSD); Bindal. C. R. Babu 32295 (BSD).

Distribution: Native of S. America, now naturalized in various parts of the world; weed of agri-

cultural fields potato and sugarcane fields, gardens and road-sides in Dehra Dun. Also collected from Mussoorie.

Notes: Very closely allied to *G. parviflora* Cav., also native of S. America, now widely distributed weed, but this can be readily distinguished from it in the following way.

1. Hispid-hairy herbs. Ray-florets 0.5-0.7 cm long; pales not 3-lobed, acute; pappus-scales aristate. Leaves with serrate, ciliate margins. ... *G. ciliata* (Raf.) Blake

1. Glabrescent herbs. Ray-florets 0.4 cm long; pales usually 3-lobed with 2 acute, lanceolate lateral lobes, obtuse at the apex; pappus-scales not aristate. Leaves with dentate, eciliate margins. ... *G. parviflora* Cav.

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NOMENCLATURE OF SOME INDIAN FERNS

Ching (Sinensia 5: 33, 1934) recognized the genus *Rumohra* Raddi Opusc. Sci. Bologn. 3: 290, 1819 and accredited about 50 species to it. Some of these species are Indian. Copeland (Genera Filicum 113, 1947) emphasized the naturalness of the genus. Holttum (Flora of Malaya 2: 484, 1954) says that the type species of *Rumohra* is closely similar to *Davallia* in most characters than *Dryopteris*. He separated the ferns with Dryopteroid characters included under *Rumohra* by Ching to *Polystichopsis* (C. Chr.) Holttum. Morton (Amer. Fern Jour. 50: 147, 1960) showed that the proper authority for *Polystichopsis* is (J. Sm.) C. Chr. Christensen recognized *Polystichopsis* as a genus and gave a brief description in Verdoorn's Manual of Pteridology 543, 1938. *Polystichopsis* according to Morton (*loc. cit.*) is an exclusively American genus. To accommodate the group *aristatum* he proposed the genus *Byrsopteris* Morton Amer. Fern Jour. 50: 149, 1960. Tindale (Contrib. N. S. Wales nat. Herb. 3: 88, 1961 & Contrib. N. S. Wales nat. Herb. Flora Ser. 208-211, 1961) pointed out that *Byrsopteris* is a superfluous name as it is antedated by *Arachniodes*. Later, Ching (Acta Bot. Sinica 10: 258, 1962) accepted the genus. The nomenclature of the Indian ferns belonging to this genus will be as follows:

Arachniodes amabilis (Bl.) Tindale in Contrib. N. S. Wales nat. Herb. 3: 90, 1961. *Aspidium amabile* Bl. Enum. Pl. Jav. 165, 1828. *Lastrea amabilis* (Bl.) Bedd. Handb. Ferns Brit. Ind. 229, 1883. *Rumohra amabilis* (Bl.) Ching in Sinensia 5: 41, 1934. *Arachniodes amabilis* (Bl.) Nayar & Chandra in Bull. bot. Surv. India 10(2): 236, 1968.

A. aristata (Forst. f.) Tindale in Contrib. N. S. Wales nat. Herb. 3: 89, 1961. *Polypodium aristatum* Forst. f. Prodr. 82, 1786. *Aspidium aristatum* (Forst. f.) Sw. in Jour. Bot. Schrad, 1800: 37, 1801; Clarke in Trans. Linn. Soc. Lond. 2, Bot. 1: 511, 1880 (excl. vars.). *Polystichum aristatum* (Forst. f.) Presl. Tent. Pterid. 83, 1836. *Lastrea aristata* (Forst. f.) Moore Ind. Fil. 85, 1858; Bedd. Handb. Ferns Brit. Ind. 229, 1883. *Dryopteris aristata* (Forst. f.) Kunze Rev. Gen. Plant. 2: 812, 1891. *Rumohra aristata* (Forst. f.) Ching in Sinensia 5: 50, 1934. *Polystichopsis aristata* (Forst. f.) Holtt. Fl. Mala. 2: 486, 1954. *Byrsopteris aristata* (Forst. f.) Morton in Amer. Fern Jour. 50: 152, 1960.

A. assamica (Kuhn) Ching in Acta Bot. Sinica. 10(3): 256, 1962. *Aspidium assamicum* Kuhn in

- Linnaea 36: 108, 1869. *Aspidium aristatum* var. *assamica* Clarke in Trans. Linn. Soc. Lond. 2, Bot. 1: 511, 1880. *Rumohra assamica* (Kuhn) Ching in Sinensis 5: t. 4-6, 1934. *Polystichopsis assamica* (Kuhn) Tagawa in Journ. Jap. Bot. 33: 94, 1958. *Byrsopteris assamica* Morton in Amer. Fern Jour. 50: 153, 1960. *Arachniodes assamica* (Kuhn) Nayar & Chandra in Bull. bot. Surv. India 10(2): 235, 1968.
- Arachniodes conifolia** (Moore) Ching in Acta Bot. Sinica 10: 259, 1962. *Lastrea conifolia* Moore Ind. Fil. 88, 1857 (new name). *Rumohra wallichii* Ching in Sinensia 5: 56, t. 9, 1934. *Aspidium conifolium* Wall. ex Kunze in Linnaea 24: 293, 1891 (non Presl. 1822). *Arachniodes conifolia* (Moore) Nayar & Chandra in Bull. bot. Surv. India 10(2): 236, 1968.
- A. carvifolia** (Kunze) Ching in Acta Bot. Sinica 10: 256, 1962. *Aspidium carvifolium* Kunze in Bot. Zeit. 283, 1848. *Rumohra carvifolia* Ching in Sinensia 5: 60, 1934.
- A. speciosa** (Don) Ching in Acta Bot. Sinica 10: 259, 1962. *Aspidium speciosum* D. Don Prodr. Fl. Nepal. 5: 1825. *A. aristatum* var. *affinis* Clarke in Trans. Linn. Soc. Lond. 2, Bot. 1: 511, 1880. *Lastrea affinis* Bedd. Handb. Ferns Brit. India 230, 1883 (pro parte). *Dryopteris speciosa* (Don) C. Chr. in Act. Hort. Goth. 1: 63, 1924. *Polystichum speciosum* (Don) J. Sm. in Jour. Bot. 4: 195, 1841. *Rumohra speciosa* (Don) Ching in Sinensia 5: 53, Pl. 7, 1934. *Byrsopteris speciosa* (Don) Morton in Amer. Fern Jour. 50: 154, 1960.
- A. spectabilis** (Ching) Ito in Hara Fl. East. Himal. 47, 1966. *Rumohra spectabilis* Ching in Sinensia 5: 58, t. 11, 1934.
- Ceratopteris thalictroides* (Linn.) Brongn. and *C. siliquosa* (Linn.) Copel. are based on *Acrostichum thalictroides* Linn. Sp. Pl. 1070, 1753 and *Acrostichum siliquosum* Linn. Sp. Pl. 1070, 1753 respectively. These are considered to be conspecific. In some of the recent publications *Ceratopteris siliquosa* (Linn.) Copel. is given as the correct name of the taxon. Copeland in his genera Filicum (83, 1947) says that *C. thalictroides* (Linn.) Brongn. is *C. siliquosa* (Linn.) Copel. If these are conspecific *C. thalictroides* alone can be the correct name (Art. 57). The nomenclature of the plant is as follows:
- Ceratopteris thalictroides** (Linn.) Brongn. Bull. Soc. Philom. 186, 1821; Bedd. Handb. Ferns Brit. Ind. 123, t. 63, 1883; Hope in Jour. Bomb. nat. Hist. Soc. 13: 458, 1901; C. Chr. Ind. Fil. 169, 1906; Tagawa Col. Illust. Jap. Pterid. 189, 1959. *Acrostichum thalictroides* Linn. Sp. Pl. 1070, 1753. *A. siliquosum* Linn. Sp. Pl. 1070, 1753, *Ceratopteris siliquosa* (Linn.) Copel. In Phil. Jour. Sci. 56: 107, 1935; Ito in Hara Fl. East. Himal. 468, 1966.
- Mecodium polyanthos** (Sw.) Copel. var. **microglossum** (Bedd.) N. C. Nair comb. novo. *Hymenophyllum polyanthos* Sw. var. *microglossum* Bedd. Ferns Brit. India t. 306, 1869 & Handb. Ferns Brit. Ind. 32, 1883.
- M. polyanthos** (Sw.) Copel. var. **blumeianum** (Bedd.) N. C. Nair comb. novo. *Hymenophyllum polyanthos* Sw. var. *blumeianum* Bedd. Ferns Brit. Ind. t. 306, 1869; Handb. Ferns Brit. Ind. 32, 1883.
- Meringium flaccidum** (v.d. Bos.) N. C. Nair comb. novo. *Leptocionium flaccidum* v.d. Bos. Ned. Kr. Arch. 5: 149, 1863. *Hymenophyllum khasianum* Bak. in Hook. & Bak. Syn. Fil. 464, 1874; Bedd. Ferns Brit. Ind. t. 276, 1868. *H. denticulatum* Sw. var. *flaccidum* Bedd. Handb. Ferns Brit. Ind. 35, 1883.
- M. neesii** (Hook.) N. C. Nair comb. novo. *Hymenophyllum neesii* Hook. Sp. Fil. 1: 99, 1844; Bedd. Ferns South Ind. t. 279, 1865 & Handb. Ferns Brit. Ind. 35, 1883. *H. tunbridgense* sensu Bedd. Ferns South Ind. t. 265, 1865 (non Sm.).
- Microlepia marginata** (Houtt.) C. Chr. var. **calvescens** (Hook.) N. C. Nair comb. novo. *Davalia calvescens* Hook. Sp. Fil. 1: 172, t. 48B, 1846. *D. urophylla* Wall. Cat. (nomen) 1829. *Microlepia urophylla* Moore Ind. Fil. 290, 1861 (nomen) ex Bedd. Ferns Brit. Ind. t. 103, 1866. *Microlepia marginalis* var. *calvescens* (Hook.) Bedd. Handb. Ferns Brit. Ind. 64, 1883.
- Plagiogyria communis* Ching is often treated under the name *Plagiogyria pycnophylla* in Indian works. Ching from a study of the type of *P. pycnophylla* (Kunze) Mett. from Java concluded that the Javanese material is different from the Yunan-Himalayan *P. pycnophylla* of authors. Hence the nomenclature of the Indian plant should be as follows:

Plagiogyria communis Ching in Acta Phytotax. Sinica 7: 147, t. 35, f. 2, 1958. *Lomaria pycnophylla* Hook. Spec. Fil. 3: t. 148, 1860 (non Kunze). *Plagiogyria pycnophylla* sensu Bedd. Handb. Ferns Brit. Ind. 129, 1883 (non Mett.): Panigrahi in Bull. bot. Surv. India 2: 313, 1960; Nayar et Kazmi in Bull. nat. bot. Gard. Lucknow 64: 28, 1962; Ito in Hara Fl. East. Himal. 470, 1966.

Pleopeltis sublineare (Baker ex Takeda) N. C. Nair comb. nov. *Polypodium sublineare* Baker ex Takeda in Not. Bot. Gard. Edinb. *Lepisorus sublinearis* (Baker ex Takeda) Ching in Bull. Fan. Mem. Inst. Biol. 4: 78, 1933; Icon. Fil. Sin. 2: t. 59, 1934.

There is some confusion regarding the nomenclature of the fern usually called as *Sphenomeris chinensis* (Linn.) Maxon. This name is based on *Trichomanes chinensis* Linn. (1753). In many of the recent publications this taxon is referred to as *Sphenomeris chusana* (Linn.) Copel. based on *Adiantum chusana* Linn. (1753) and keep *Sphenomeris chinensis* in synonymy. In Hooker's Species Filicum (1: 187, 1846) *Trichomanes chinensis* Linn. is given as the basionym of *Davallia chinensis* (Linn.) Swartz. *Davallia chusana* (Linn.) Willd. = *Adiantum chusanum* Linn. is also kept in synonymy but with a question mark. J. Smith (Bot. Voy. Herald. 430, 1857) transferred *Trichomanes chinensis* Linn. to the genus *Odontosoria* as *Odontosoria chinensis* (Linn.) J. Sm. He also considered *Adiantum chusanum* Linn. conspecific with *Trichomanes chinensis* Linn. According to Art. 57 the specific epithet *chinensis* must be followed. Hence the nomenclature of the plant is:

Sphenomeris chinensis (Linn.) Maxon in Wash. Acad. Sci. Jour. 3: 114, 1913. *Trichomanes chi-*

nensis Linn. Sp. Pl. 2: 1099, 1753. *Adiantum chusanum* Linn. Sp. Pl. 2: 1095, 1753. *Adiantum chinensis* (Linn.) Burm. Fl. Ind. 236, 1768. *Davallia chinensis* (Linn.) Sm. Mem. Ac. Turm. 5: 514, 1793; Willd. Sp. Pl. 5: 474, 1810; Hook. Sp. Fil. 187, 1846 (Swartz); Clarke in Tr. Linn. Soc. Lond. 2: 449, 1880. *Davallia chusana* (Linn.) Willd. Sp. Pl. 5: 475, 1810. *Microlepia chinensis* (Linn.) Mett. Fil. Lips. 103, 1856. *Lindsaya chinensis* (Linn.) Mett. ex Kuhn Fil. Afr. 67, 1868. *Stenoloma chinensis* (Linn.) Bedd. Handb. Ferns Brit. Ind. 70, t. 34, 1883 (excl. syn. *Davallia tenuifolia*); Alston & Bonner in Candollea 15: 198, 1956. *Odontosoria chinensis* (Linn.) J. Sm. Bot. Voy. Herald. 430, 1857; C. Chr. Ind. Fil. 464, 1906. *Stenoloma chusanum* (Linn.) Ching in Sinensia 3: 377, 1933. *Odontosoria chusana* (Linn.) Masam. Mem. Fac. Sc. Agric. Taikoku Univ. 11: 67, 1934. *Sphenomeris chusana* (Linn.) Copel. in Bish. Mus. Publ. 59: 69, 1929; Holttum Fl. Mala. 2: 341, 1954; Tagawa Col. Ill. Jap. Pterid. 257, 1959.

Sphaenomeris chinensis (Linn.) Maxon var. *tenuifolia* (Sw.) N. C. Nair comb. nov. *Davallia tenuifolia* Sw. Schrad. Jour. 1800: 88, 1801. *Stenoloma tenuifolia* (Sw.) Fee Gen. Fil. 330, 1852. *Sphaenomeris chusana* (Linn.) Copel. var. *tenuifolia* (Sw.) C. Chr. Pterid. Madg. 78, t. 7, fig. 4-6, 1932. *Stenoloma chinensis* Bedd. Handb. Ferns Brit. Ind. 70, 1883 (pro parte).

Pteris setigera (Bedd.) N. C. Nair comb. nov. et stat. *P. quadriaurita* Retz. var. *setigera* Bedd. Ferns Brit. Ind. t. 202, 1866; Handb. Ferns Brit. Ind. 111, 1883.

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THE IDENTITY OF *TEPHROSIA AXILLARIS* A. R. SMITH

A. R. Smith (in Kew Bull. 21: 311, 1967) described with illustrations a new species *Tephrosia axillaris* on the basis of the collections, *Ahluwalia* 25, *Ahluwalia* 3560 and *Ahluwalia* 3816 from Jamnagar in Gujarat State and he designated *Ahluwalia* 3816, a specimen collected from Rosi-Valsura, Jamnagar as the holotype. This taxon has already been described by Rev. Fr. H. Santapau (in Proc. nat.

Inst. Sci. India 24: 133, 1958) under the name *Tephrosia jamnagarensis* typified by the specimen Santapau 7522, collected at Rosi, the port of the city of Jamnagar in Gujarat. Santapau collected this specimen as early as 1945 and the type is available at the Blatter Herbarium. It is interesting to note that the type locality of A. R. Smith's and Santapau's species are identical. A. R. Smith's type des-