

ADDITIONS TO THE INDIAN GRASS FLORA IN LAST TWO DECADES

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ABSTRACT

The paper is an enumeration of 94 names which includes new taxa, new records and some correct names, reported by various authors after the publication of Bor's work on Indian Grasses in 1960.

Dr. N. L. Bor's book on the "Grasses of Burma, Ceylon, India and Pakistan" published in 1960 is the only concise and consolidated account of the Indian species and varieties of the grasses. Recent researches including explorations, critical identification and revisions during last two decades have resulted in discovery of many new taxa and new records and in changes in nomenclature. It is felt, therefore, necessary to have an up-to-date taxonomic evaluation of our grass flora. With this view, notes on identification, distribution and nomenclature relevant to the Indian grasses have been published from time to time by Jain (1966, 1968a, 1968b), Jain and Banerjee (1967), Saha *et al.* (1971), Jain & Das (1973) and Shukla & Jain (1978).

It was considered useful to make a review of the taxa of grasses that have been added to the Indian flora during last two decades. Taxa of grasses relevant to Nepal have also been included.

The present paper is a list of 94 names, and includes the new taxa (genera, species, varieties), new records and some correct names which have been reported for this subcontinent after the work of Bor (henceforth referred as Grasses, 1960). This alphabetical list contains 60 new taxa (7 genera,

42 species, 10 varieties, 1 forma), 26 new records and 8 corrected names.

The new taxa are listed without any sign; original reference of their publication is given.

The taxa which are new records for India are marked with single dagger sign (†); the relevant references have been given.

The cases of change in names are marked with asterisk sign (*); here also the reference of the work where the name has been adopted as correct is given, followed by synonym and a reference of Bor, Grasses 1960.

For new taxa and first records from India, the locality is briefly indicated (name of State followed by locality).

†*Alloteropsis semialata* (R. Br.) Hitch. var. *viatica* (Griff.) Ellis et Karthik J. Bomb. nat. Hist. Soc. 70: 594. 1973. *Aira viatica* Griff.; Bor, Grasses 277. 1960. *pro syn.* ASSAM, MEGHALAYA, MANIPUR, KERALA; SRI LANKA.

†*Andropogon polytychus* Steud.; Shetty & Vivekananthan, Bull. bot. Surv. India 15: 276, 1973.
TAMILNADU: Nilgiri; KERALA: Anaimudi.

Anthoxanthum borii Jain & Pal, J. Bomb. nat. Hist. Soc. 72: 92-94, 1975.
TAMIL NADU: Shenthadikanal.

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- Arthraxon deccanensis** Jain, Ibid. 68: 297-299, 1971.
MAHARASHTRA: Sinhagad (Pune).
- A. inermis** Hook. f. var. **tzvelevii** Jain, Sci. & Cult. 37: 55-56, 1971.
MAHARASHTRA: Purandhar.
- A. junnarensis** Jain & Hemadri. J. Bomb. nat. Hist. Soc. 68: 300-301, 1971.
MAHARASHTRA: Warsubai plateau (Junnar).
- A. lancifolius** (Trin.) Hochst. var. **hindustanicus** Jain & Deshpande, J. Indian bot. Soc. 51: 176, 1972.
GOA.
- A. raizadae** Jain, Hemadri & Deshpande, Ibid. 51: 103-106, 1972.
MAHARASHTRA: Mahabaleshwar.
- A. satarensis** Alneida. J. Bomb. nat. Hist. Soc. 67: 515-517, 1969; emend. Deshpande et Hemadri, Bull. bot. Surv. India 12: 274-275, 1970.
MAHARASHTRA: Satara-Keshyaturda.
- Arundinella setosa** Trin. var. **nilagirica** G. V. S. Rao, J. Bomb. nat. Hist. Soc. 73: 827-833, 1975.
TAMIL NADU: Nilgiri.
- Bothriochloa jainii** Deshpande & Hemadri, Indian For. 97: 593-596, 1971.
MAHARASHTRA: Durga Khilla—Pune.
- Brachlaria nilagirica** Bor, Bot. Tiddsskrift 67: 325, 1973.
TAMIL NADU: Nilgiri.
- †**Bromus lanceolatus** Roth; Bor in Fl. Iraq. 9: 147, 1968; Saha *et al.* Bull. bot. Surv. India 13: 14, 1971.
JAMMU & KASHMIR: Kashmir.
- Capillipedium magdalenii** Alneida J. Bomb. nat. Hist. Soc. 72: 813-814, 1975.
KARNATAKA: Agumbe.
- C. nagense** Bor, Brittonia 16: 228, 1964.
NAGALAND: Dzulake valley—Naga hills.
- †**Catapodium rigidum** (L.) C. E. Hubb. ex Dony; Bor in Fl. Iranica 70: 52, 1970.
INDIA.
- Cenchrus rajasthanensis** Kanodia & Nanda, Geobios 5: 156-159, 1978.
RAJASTHAN.
- Coelachne minuta** Bor, J. Bomb. nat. Hist. Soc. 58: 317-318, 1961.
MAHARASHTRA: Mahabaleshwar.
- Coelachyropsis** Bor, Ann. Naturhist. Mus. Wein 75: 21-26, 1971.
- C. lagopoides** Bor, Ibid. 75: 25, 1971.
TAMIL NADU: Cuddapah, Sinumalais;
ANDHRA PRADESH: Guntur.
- Cymbopogon distans** (Nees ex Steud.) Wats. var. **mundensis** B. K. Gupta, Proc. Ind. Acad. Sci. Sec. B. 71: 97, 1970.
JAMMU & KASHMIR: Upper Munda.
- C. flexuosus** (Nees ex Steud.) Wats. var. **coimbatorensis** B. K. Gupta, Ibid. 71: 94, 1970.
TAMIL NADU: Coimbatore (Cultivated in Jammu).
- C. jwarancusa** (Jones) Schult. var. **assamensis** B. K. Gupta, Ibid. 71: 95, 1970.
ASSAM (Cultivated in Jammu).
- †**C. jwarancusa** (Jones) Schult. subsp. **olivieri** (Boiss.) S. Soenarko, Reinwardtia 9: 307-308, 1977.
JAMMU & KASHMIR: Nitar valley.
- C. ladakhensis** B. K. Gupta, Ibid. 71: 10, 1970.
JAMMU & KASHMIR: Kashmir.
- C. martinii** (Roxb.) Wats. var. **sofia** B. K. Gupta, Ibid. 71: 97-98, 1970.
JAMMU & KASHMIR: Udhampur. Throughout India.
- C. motia** B. K. Gupta, Ibid. 71: 92, 1970.
UTTAR PRADESH: Haldwani.
- C. parkeri** Stapf var. **jammuensis** B. K. Gupta, Proc. Ind. Acad. Sci. Sec. B 71: 96, 1970.
JAMMU & KASHMIR: Jammu.
- C. ramagarensis** B. K. Gupta, Ibid. 71: 86, 1970.
JAMMU & KASHMIR: Ramnagar.

- Cynodon barberi** Rangachari & Tadulingam f. **longifolius** Jain, Indian For. 92: 699, 1966.
ORISSA: Puri.
- ***Dichanthium paranjpyeanum** (Bhide) Clayton, Kew Bull. 32: 579, 1977 (1978); *Schizachyrium paranjpyeanum* (Bhide) Raiz. & Jain; Bor, Grasses 216, 1960.
- Digitaria cruciata** (Nees ex Steud) A. Camus var. **pectinata** Veldk. Blumea 21: 72, 1973.
MEGHALAYA: Khasi hills.
- Dimeria santapau** Almeida, J. Bomb. nat. Hist. Soc. 66: 510-513, 1970.
MAHARASHTRA: Mirjal flats—N. Kanara.
- †**D. trimenii** Hook. f.; Jain *et al.* Ibid. 72: 761, 1975.
ORISSA.
- Enteropogon coimbatorensis** Nair *et al.* Proc. Ind. Acad. Sci. 86B: 84, 1977.
TAMILNADU: Kuridimalai.
- †**Eragrostis pappiana** Choiv; Jain, Bull. bot. Surv. India 10: 161, 1968.
RAJASTHAN: Jhalawar.
- †**E. tef** (Zucc.) Trotter; Jain, Ibid. 10: 161, 1968.
RAJASTHAN: Jhalawar.
- †**Eriochloa nubica** (Steud.) Hack & Stapf ex Thell; Jain, Ibid. 10: 162, 1968.
RAJASTHAN: Kota.
- †**Eulalia thwaitesii** (Hack.) O. Ktze; Shetty & Vivekananthan, Bull. bot. Surv. India 15: 276, 1973.
KERALA: Anaimudi.
- E. trispicata** (Schult.) Henr. var. **hookeri** P. R. Sur. Curr. Sci. 44: 362-363, 1975.
NEPAL.
- Eulaliopsis duthiei** P. R. Sur, J. Bomb. nat. Hist. Soc. 72: 815-817, 1975.
UTTAR PRADESH: Tehri Garhwal.
- †**Garnotia acutigluma** (Steud.) Ohwi; Gould, Kew Bull. 27: 540-544, 1972.
MEGHALAYA: Khasi hills, Garo hills; SIKKIM.
- G. exaristata** Gould, Kew Bull. 27: 558, 1972.
KERALA; TAMIL NADU: Conchin-Coimbatore; SRI LANKA.
- †**G. fergusonii** Trimen; Gould, Kew Bull. 27: 537-538, 1972.
TAMIL NADU: Nilgiris.
- ***G. polypogonoides** Munro ex Oliver; Gould, Ibid. 27: 535, 1972; *G. emodi* (Arn. & Nees) Jan. Bor, Grasses, 567, 1960.
- G. puchiparensis** Bor, Indian For. Rec. n.s. Bot. 2: 234, 1941; Ved Prakash *et al.* J. Indian Bot. Soc. (In press); Ved Prakash et Jain, Fasc. Fl. Ind. 3: 11, 1979.
TAMIL NADU: Puchipara.
- †**G. stricta** Brongn. var. **longiseta** Hack.; Ved Prakash *et al.* J. Indian Bot. Soc. (In Press); Ved Prakash et Jain, Fasc. Fl. Ind. 3: 5-6, 1979.
ARUNACHAL PRADESH: Subansiri; MEGHALAYA: Khasi hills.
- †**G. tenella** (Arn. ex Miq.) Jan.; Gould, Kew Bull. 27: 528, 1972; Ved Prakash et Jain, Fasc. Fl. Ind. 3: 13-14, 1979.
THROUGHOUT INDIA.
- †**Hierochloa odorata** (L.) P. Beauv.; Raizada & Chatterjee; Indian For. 88: 428-430, 1962.
Record for HIMALAYA: Central Nepal.
- †**Hordeum bogdanii** Wilensky; Jain, Indian For. 92: 366-367, 1966.
JAMMU & KASHMIR: Srinagar.
- Isachne bicolor** Naik & Patunkar, Bull. bot. Surv. India 15: 157-158, 1973.
MAHARASHTRA: Mhaismal Plateau—Aurangabad.
- I. borii** Hemadri, Indian For. 97: 223-225, 1971.
MAHARASHTRA: Dhak khilla—Pune.
- †**I. globosa** var. **effusa** (Trin. ex Hook. f.) Senaratna; Singh & Deshpande, Indian For. 99: 674-675, 1973.
GOA.

- †**Isachne kinabaluensis** Merr.; Ved Prakash
MEGHALAYA: Cherra Punji.
- I. mysorensis** Sundararaghavan, Ibid. 97:
304-307, 1971.
KARNATAKA: Shimoga.
- Ischaemum bolei** Almeida, Ibid. 98: 236-238,
1972.
MAHARASHTRA: Savantwadi—Ratnagiri.
- I. raizadae** Hemadri & Billore, Indian For.
96: 318-321, 1970.
MAHARASHTRA: Harishchandragarh. *I.*
borii Almeida, J. Bomb. nat. Hist. Soc. 66:
513-515, 1970.
- I. vembanadense** Patil & D. Cruz., J. Bomb.
nat. Hist. Soc. 70: 324-325, 1973.
KERALA: Allepy.
- Iseilema hubbardii** Murty, Ibid. 65: 665-
666, 1968.
MADHYA PRADESH: Ujjain.
- I. venkateswarlui** Satyavathi, Ibid. 65: 666-
667, 1968.
ANDHRA PRADESH: Guntur.
- Lasiurus ecaudatus** Sat. & Shank. Ibid. 60:
763-766, 1963.
RAJASTHAN: Jodhpur.
- †**Leptaspis urceolata** R. Br.; Rao, Curr. Sci.
33: 120, 1964.
KERALA: Chudal area, Tenmalai forest
division.
- †**Lepturus raicans** (Steud.) A. Camus;
Singh, *et al.* Bull. bot. Surv. India 18:
141, 1976.
KARNATAKA: N. Kanara.
- Manisuris goanensis** Rolla Rao & Hemadri,
Ibid. 10: 106-109, 1968.
GOA.
- M. mysorensis** Jain & Hemadri, Ibid. 10:
280-282, 1968.
KARNATAKA: Castle rock.
- M. ratnagirica** Kulkarni & Hemadri, Indi-
an For. 100: 250-254, 1974.
MAHARASHTRA: Ratnagiri.
- M. santapaui** Jain & Deshpande, Bull. bot.
Surv. India 10: 277-279, 1968.
MAHARASHTRA: Ratnagiri.
- Normanboria** Butzin Taxon 27: 300-301,
1978; *Arthrochloa* Lorch. J. Indian bot.
Soc. 39: 490, 1960 non Schult. in Roem.
& Schult. Syst. Veg. 2 Mant. 524, 1827.
- ***N. henrardiana** (Bor) Butzin, Taxon 27:
301, 1978; *Dactyloctenium henrardia-*
num Bor, Grasses 489, 1960.
- ***Oropetium roxburghianum** (Steud.) Phil-
lips, Kew Bull. 30: 469, 1975; *Tripogon*
roxburghianus (Steud.) Bhide; Bor, Gras-
ses 524, 1960.
- †**Oryza glaberrima** Steud.; Jain, Bull. bot.
Surv. India 10: 163, 1968.
MADHYA PRADESH.
- O. nivara** S. D. Sharma & Shastri, Indian
J. Genet. & Pl. Breed. 25: 161-165, 1965.
MAHARASHTRA.
- †**Panicum elegantissimum** Hook. f.; Baner-
jee, J. Bomb. nat. Hist. Soc. 68: 494-495,
1971; Banerjee *et al.* Bull. bot. Surv.
India 16: 77, 1974.
WEST BENGAL: Howrah Botanic Garden.
- P. nehrucense** Jauhar & Joshi, Bull. bot.
Surv. India 8: 97-99, 1966.
RAJASTHAN: Jodhpur.
- Parahyparrhenia** A. Camus, Bull. Mus.
Hist. Nat. Paris Ser. 2. 22: 404, 1950.
- ***Pennisetum americanum** (L.) Leeke, Zeit-
schr. Naturw. 79: 52, 1907; Edward,
Taxon 25: 297-304, 1976. *P. typhoideum*
L. Rich. in pers. Syn. Pl. 1: 72, 1805;
Bor, Grasses 350, 1960.
- ***Phacelurus zea** (Clarke) Clayton, Kew Bull.
33: 177, 1978; *Thyrsia zea* (Clarke)
Stapf; Bor, Grasses 255, 1960.
- Poa hylobates** Bor, Bull. bot. Surv. India
7: 132, 1965.
NEPAL.
- Pogonatherum santapaui** P. R. Sur, J. Bomb.
nat. Hist. Soc. 73: 190-192, 1976.
UTTAR PRADESH: Garhwal.

- †**Polytrias amaura** (Buse) Kuntze; Jain & Pal, *Sci. & Cult.* 34: 361-362, 1968.
WEST BENGAL: Howrah Botanic Garden.
- Porteresia** Tateoka *Bull. nat. Sci. Mus.* 8: 405-406, 1965. *Sclerophyllum* Griff. *Notul Pl. As.* 3: 8, 1851 non Gaud. *Fl. Helv.* 5: 47, 1829; *Indoryza* A. N. Henry & B. Roy, *Bull. bot. Surv. India* 10: 274, 1968.
- Pseudanthistiria intermedia** Birari & D. Cruz, *J. Bomb. nat. Hist. Soc.* 73: 192-193, 1976.
MAHARASHTRA: Satpura.
- Pseudobrachiaria** Launert, *Mitt. Bot. Staatssimml. Munchen* 7: 158, 1970.
- †**Secale afghanium** (Vavilov) Roshev.; Saha *et al.* *Bull. bot. Surv. India* 13: 13-15, 1971.
JAMMU & KASHMIR: Gilgit, Kashmir.
- †**Setaria paniculifera** (Steud.) Fourn. ex Hemsl.; Jain, *Bull. bot. Surv. India* 10: 163, 1968.
NAGALAND: Kohima.
- †**Sporobolus festivus** Hochst. ex A. Rich.; Patunkar, *Bull. bot. Surv. India* 17: 168-169, 1975.
MAHARASHTRA: Marathwada.
- S. staintonii** Bor, *Bull. bot. Surv. India* 7: 133, 1965.
NEPAL.
- Themeda decruzii** Birari, *J. Bomb. nat. Hist. Soc.* 70: 346-347, 1973.
UTTAR PRADESH: Mussoorie.
- Trachynia** Link, *Hort. Berol.* 1: 42, 1827; Bor in *Fl. Iraq.* 9: 168, 1968; Bor, *Grasses* 449, 1960, pro syn.
- ***Trachynia distachya** (L.) Link, (l.c.); Bor, in *Fl. Iraq.* 9: 168, 1968; *Brachypodium distachyon* (L.) P. Beauv.; Bor, *Grasses* 449, 1960.
- Tripogon polyanthus** Naik & Patunkar, *Bull. bot. Surv. India* 15: 158-159, 1973.
MAHARASHTRA: Daulatabad.
- Trisetaria** Forsk. *Fl. Aegypt. Arab.* 27, 1775; Bor, in *Fl. Iraq.* 9: 356, 1968.
- ***T. cayanillesii** (Trin.) Maire; Bor in *Fl. Iraq.* 9: 356, 1968; *Lophochloa cavanillesii* (Trin.) Bor, *Grasses* 445, 1960.
- Zenkeria sebastinei** Henry & Chandrabose, *Bull. bot. Surv. India* 15: 142-144, 1973.
TAMIL NADU: Agastyamalai.

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