
BIBLIOGRAPHY

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- *Aellen, P. (1961). Die Amaranthaceen. Mitteleuro Pas. Munich, Carl Hanser Verlag.
- Audus, L.J. and Thresh, R. (1956) . The effects of Synthetic growth regulator treatments on the levels of free endogenous growth substances in plants. Ann. Bot., 20: 439-459.
- Backer, C.A. (1949). Amaranthaceae, In:Fl. Malesiana I, 4(2): 69-89.
- Bali, P.N. and Tandon, S.L. (1957). Morphological and cytological studies of the diploid and colchicine induced autotetraploid in Iberis amara L. Phyton, 7: 107.
- Bates, G.H. (1939) . Polyploidy induced by colchicine and its economic possibilities. Nature, 144: 315-316.
- Behera, B. and Patnaik, S.N. (1974). Cytotaxonomic studies in the family Amaranthaceae. Cytologia, 39: 121-131.
- _____ (1975 a). Induced polyploidy in Amaranthus hypochondriacus L. and A. dubius Mart. Ex Thell. Cytologia, 40 : 157-168.
- _____ (1975 b) .EMS induced mutations in Amaranthus tricolor L. Curr. Sci., 44: 319-320.
- _____ (1981). Trisomy in Amaranthus dubius Mart. ex Thell. Pros. Cytol. and Genet., 3: 183-185.
- _____ (1982). Genome analysis of Amaranthus dubius Mart. ex Thell. through the study of Amaranthus spinosus X Amaranthus dubius hybrid. Cytologia, 47: 379-389.
- Behera, B.(1975). Cytogenetic and Biosystematic studies in Amaranthaceae. Ph.D. Thesis, (Utkal University).

Behera, B. Tripathy, A. and Patnaik, S.N. (1974). Histological analysis of colchicine induced deformities and cytochimeras in Amaranthus caudatus and A. dubius. J.Hered., 65:179-184.

Behera, N.C. and Patnaik, S.N. (1979). Viable mutation in Amaranthus L. Ind. J.Genet. and Pl. Breed., 39(2): 163-170.

(1982). Histology of mutanats in Amaranthus hypochondriacus L. Ind. J.Genet. and Pl.Breed., 42(1): 5-10.

*Bender, K. and Gaul, H. (1966). Zur Frage der Diploidisierung autotetraploider Gerste. Z.Pflanzenzucht., 56: 164-183.

Biswas, A.K. and Bhattacharyya, N.K. (1971). Induced polyploidy in legumes I. Cyamopsis psoraloides DC. Cytologia, 36(3): 469-478.

*Blakeslee, A. (1937). Dedoublement du nombre de chromosomes chesless plantes par treatment chemique. C.R.Acad.Sci., 205: 476-479.

Blixt, S.(1961). Quantitative studies of induced mutation in peas V.Chlorophyll mutation. Agric. Hort. Genet., 19: 402-447.

Bragdo, M. (1955). Production of polyploids by colchicine. Euphytica, 4: 76-82.

Butterfass, Th. (1987). Cell volume ratios of natural and induced tetraploid and diploid flowing plants. Cytologia, 52: 309-316.

Carretero, J.L. (1984). IOPB chromosome number reports. Taxon, 33 (3) : 536-539.

Clifford, H.T. (1959). On hybridization between Amaranthus dubius and Amaranthus spinosus in the vicinity of Ibadan, Nigeria. J. West Afr. Sci. Ass., 4: 112-116.

*Covas, G. (1950). Un híbrido interspecific natural en Amaranthus. Rev. Argentina agron., 17: 257-260.

*_____ and Schnack, B. (1946). Numero de cromosoma en Antofitas de la region de cuyo (Republica Argentina). Rev. Argentina agron., 13: 153-166.

Cumming, B.C. (1959). The control of growth and development in red clover (Trifolium pratense L.). Can. J. Bot., 37: 1049-1054.

Darlington, C.D. (1937). Recent advances in cytology. 2nd Edn. London.

_____ (1942). Vitamin C and chromosome number in Rosa. Nature, 150: 404.

De Candolle, A. (1886). Origin of cultivated plants. (Reprint 2nd edn. 1959), New York, Hafner.

Dermen, H. (1936). A cytological analysis of polyploidy induced by colchicine and extremes of temperatures. J. Hered., 29: 211.

Desai, S.R. (1971). Morphological and cytological studies in Amaranthaceae. Cytologia, 36: 349-358.

Dnyansagar, V.R. and Nadkarni, R.S. (1983). Induced tetraploidy in Crotalaria juncea Linn. Cytologia, 48: 483-489.

Elias, J. (1977). Proc. First amaranth seminar. Rodale Press Inc. Emmaus, P., pp. 16.

- Ellerstorm, S. and Sjodin, J. (1966). Frequencies and vitality of aneuploids in a population of tetraploid red clover . Hereditas, 55: 166.
- Feine, L.B., Harwood, R.R., Kauffman, C.S. and Senft, J.P. (1979). Amaranth: gentle giant of the past and future. AAAA Symp. No. 38: 41-63.
- Flores, H.E. and Teutonico, R.E. (1986). Amaranths (Amaranthus species): Potential grain and vegetable crops. In: Biotechnology in Agriculture and forestry Vol. 2 (ed. Bajaj, Y.P.S.), Springer Verlag, Berlin, pp. 568-578.
- Frydenberg, O., Doll, H. and Sandfear, J. (1964). The mutation frequency in different spike categories in barely, Radiat. Bot., 4: 13-25.
- Frydenberg, O and Jacobsen, P. (1966). The mutation and segregation frequencies in different spike categories after chemical treatment of barely seeds. Hereditas, 55: 227-248.
- Galston, A.W. (1947). The effect of 2,3,5- tri iodobenzoic acid on growth and flowering of soybeans. Am. J.Bot., 31: 356-360.
- Gamborg, O.L., Miller, R.A. and Ojima, K. (1968) . Nutritional requirements of suspension cultures of soybean root cells. Exp. Cell. Res., 50: 151-158.
- Gardenas, M. and Hawkes, J.G.(1948).Chromosome Atlas of flowering plants . (ed. Darlington, C.D. and Wylie, A.P., 1955). George Allen and Unwin Ltd., London, pp 77-78.
- Gaul, H. (1961). Studies on diplontic selection after X-irradiation of barely seeds. Proc. Symp. Effects of ionizing radiation on seeds, IAEA, Vienna, pp. 117-138.

- Gill, B.S. and Basudeva, S. (1970). Cytological studies in some members of Amaranthaceae. *Curr. Sci.*, 39: 445-446.
- Gilles, A. and Randolph, L.F. (1951). Reduction of quadrivalent frequency in autotetraploid maize during a period of ten years. *Am.J.Bot.*, 38: 12-17.
- Grant, W.F. (1959 a). Cytogenetic studies in Amaranthus III. Chromosome numbers and phylogenetic aspects. *Canad.J.Genet. Cytol.*, 1: 313-328.
- _____ (1959 b) . Cytogenetic studies in Amaranthus I. Cytological aspects of sex-determination in dioecious species. *Canad.J.Bot.*, 37: 413-417.
- _____ (1959 c). Cytogenetic studies in Amaranthus II. Natural interspecific hybridization between Amaranthus dubius and Amaranthus spinosus. *Canad. J.Bot.*, 37: 1063-1070.
- Gupta, R. and Gupta, P.K. (1975). Induced polyploidy in Crotalaria L. 1. C. juncea 2. C. retusa. *J.Ind.Bot.Soc.*, 54:175.
- Gupta, A.K. and Sinha, R.P. (1978). Cytotaxonomy of artificially induced polyploids of Crotalaria. *The Nucleus*, 21(1):26-28.
- Gupta, S.K. and Roy, S.K. (1986). Induced colchipoity in Nicandra physaloides. *Cytologia*, 51: 319-324.
- Hansel, H. (1966). Induction of mutations in barely: some practical and theoretical results. In: *Mutation in plant breeding* (Proc. Panel, Vienna, 1966, IAEA, Vienna) pp. 117-138.

- Heiser, C.B. and Whitaker, T.W. (1948). Chromosome number, polyploidy and growth habit in California weeds. *Am.J.Bot.*, 35: 179-186.
- Hindakova, M. and Schwarzova, T. (1978). IOPB Chromosome number reports. *Taxon*, 27(4): 375-392.
- _____ (1980). IOPB Chromosome number reports. *Taxon*, 29(5/6): 703-730.
- Jackson, R.C. and Casey, J. (1980). Cytogenetics of polyploids. In: *Polyploidy, Biological relevance* (ed. W.H. Lewis), Plenum Press, New York, pp. 17-44.
- Jain, S.K., Hauptli, H. and Vaidya, K.R. (1982). Out crossing rate in grain amaranths. *J.Hered.*, 73: 71-72.
- Kao, K.N. and Michayluk, M.R. (1974). A method for high frequency intergenetic fusion of plant protoplasts. *Planta*, 115: 355-367.
- Keller, W.A. and Melchers, G. (1973). The effect of high pH and Calcium on tobacco leaf protoplast fusion. *Z. Naturforsch.*, 28b: 737-741.
- Khanna, P.P., Singh, H.B. and Prasad, R. (1960). Natural interspecific hybrids in Amaranthus. *Proc.Ind.Sci.Cong.,Part-IV*, pp.20-21.
- Khoshoo, T.N. and Pal, M. (1972). Cytogenetic patterns in Amaranthus. *Chromosome Today*, 3: 259-267.
- Kihara, H., Yamamoto, Y. and Honoso, S. (1931). A list of chromosome numbers of plants cultivated in Japan. *Chokobutsu senshokutaisu nokenkyu* (Tokyo), pp. 193-330.
- Kinsara, A., Patnaik, S.N., Cocking, E.C. and Power, J.B. (1986). Somatic hybrid plants of Lycopersicon esculentum Mill. and Lycopersicon peruvianum Mill. *J.Plant. Physiol.*, 125:225-234.

- Kostoff, D. (1940). Fertility and chromosome length: Correlation between chromosome length and viability of gametes of autotetraploid plants. *J.Hered.*, 31: 33-34.
- Kowal, T. (1954). Morphological and anatomical features of the seeds of the genus Amaranthus and Keys for their identification. *Monogr. Bot.*, 2: 162-193.
- Krause, B.F. (1971). Structural and histological studies of the cambium and the shoot meristems of soybean treated with 2,3,5- tri iodobenzoic acid. *Am.J. Bot.*, 58: 148-159.
- Krishnaswamy, N. and Raman, V.S. (1949). A note of chromosome numbers of ~~some~~ economic plants of India. *Curr. Sci.*, 18: 376-378.
- Kulakow, P.A., Hauptli, H. and Jain, S.K. (1985). Genetics of Grain amaranths I. Mendelian analysis of six colour characteristics. *J. Hered.* 76: 27-30.
- Kulakow, P.A. (1987). Genetics of grain amaranths II. The inheritance of determinance, panicle orientation, duration and embryo colour in Amaranthus caudatus. *J. Hered.*, 79(5): 293-297.
- Lavana, U.C. (1986). High bivalent frequencies in artificial autopolyploides of Hyoscyamus muticus L. *Canad. J.Genet. Cytol.*, 28: 7-11.
- Levan, A. (1942). Plant breeding by induction of Polyploidy and some results in clover. *Hereditas*, 28: 245-246.
- Madhusoodanan, K.J. and Pal, M. (1981) . Cytology of vegetable amaranths. *Bot. J.Linn. Soc.*, 82: 61-68.
- _____ (1983). Colchitetraploids in Amaranthus tricolor Linn. *New Botanist*, 10: 17-23.

- Madhusoodanan, K.J. and Pal, M.(1984). Autotriploids in Amaranthus tricolor Linn. Ind.J.Genet.,44(1): 181-185.
- Manton, I. (1950). Problems of cytology and evolution in the petridophyta. Univ. Press., Cambridge, England.
- Mathan, D.S.(1965). Morphogenetic effect of phenyl boric acid on various leaf shape mutants in the tomato, duplicating the effect of the lanceolate gene. Z. vererblehre, 97: 157-165.
- Mehta, R.K. and Swaminathan, M.S. (1957). Studies on induced polyploids in forage crops. Ind.J.Genet. and Pl.Breed., 17: 27-57.
- Mercy kutty, V.C. and Kumar, H. (1983). Studies on induced tetraploid in four diverse cultivars of Pea (Pisum sativum L.) Cytologia, 48: 51-58.
- Mitra, R. (1971). Cytology of Amaranthaceae. Proc. Ind. Sci. Cong: P.III, 58th Session, pp. 470-471.
- Morishima, K. and Oka, H.I. (1967). Differences in internode elongation type of rice, Japan J.Breed., 17 suppl., 1: 184-185.
- Morrison, J.W. and Rajhathy, T. (1960). Frequency of quadrivalents in autotetraploid plants. Nature, 187: 528-530.
- Mulligan, G.A.(1957). Chromosome numbers of Canadian Weeds I. Canad. J.Bot., 35: 779-789.
- Murashige, T. and Skoog, F. (1962) . A revised medium for rapid growth and bioassays with tobacco tissue culture. Physiol. Plant., 15: 473-497.
- Murray, M.J. (1940 a) . The genetics of sex-determination in the family Amaranthaceae. Genetics, 25: 409-431.

Murray, M. J. (1940 b) . Colchicine induced tetraploids in dioecious and monoecious species of Amaranthaceae. J.Hered. 31: 477-485.

Pal, M. (1971). A polyhaploid plant of Amaranthus dubius. Ind. J.Genet. and Pl.Breed., 31(3): 397-402.

_____ (1972 a). Interspecific aneuploidy in Amaranthus graecizans L. Curr. Sci., 41: 262-263.

_____ (1972 b). Evolution and improvement of cultivated amaranths: III. Amaranthus spinosus-dubius Complex. Genetica, 43: 106-118.

_____ and Khoshoo, T.N. (1965), Origin of Amaranthus dubius . Curr. Sci., 34: 370-371.

_____ (1968). Cytogenetics of the raw autotetraploid of Amaranthus edulis. NBG.Tech. Com., pp. 25-36.

_____ (1972). Evolution and improvement of cultivated amaranths. V. Inviability, weakness and sterility in hybrids. J.Hered., 63(2): 78-82.

_____ (1973 a). Evolution and improvement of cultivated amaranths. VI. Genetic relationship in grain types. Theo. Appl. Genet., 43: 242-251.

_____ (1973 b) . Evolution and improvement of cultivated amaranths. VII. Cytogenetic relationships in vegetable amaranths. Theo. Appl. Genet., 43: 343-350.

_____ (1977). Evolution and improvement of cultivated amaranths. VIII. Induced autotetraploidy in grain types. Z.Pflanzenzuchtg, 78: 135-148.

Pal, M. and Pandey, R.M. (1982). Decrease in quadrivalent frequency over a ten years period in autotetraploids in two species of grain amaranths. *Cytologia*, 47: 795-801.

_____ and Khoshoo, T.N. (1982). Evolution and improvement of cultivated amaranths IX. Cytogenetic relationship between two basic chromosome numbers. *J.Hered.* 73: 353-356.

Pandey, R.M. (1981). Genetic associations in Amaranthus. *Ind. J.Genet. and Pl.Breed.*, 41(1): 78-83.

Patnaik, S.N.(1987). Small scale chemical fusion- An efficient method for the yield of plant heterokaryons. In: *Proc. Symp. Plant cell and tissue culture of economically important plants* (ed. G.M.Reddy). Hyderabad, India, pp. 43-48.

_____ and Behera, B.(1975). Problems of evolution in the genus Amaranthus L. *J.Cytol. Genet. Cong. suppl.*, pp. 137-142.

Peters, I. and Jain, S.K. (1987). Genetics of grain amaranths III. gene-cytoplasmic male sterility. *J.Hered.* 71: 290-292.

Phadnis, B.A. and Narkheda, M.N. (1972). Chromosome behaviour in colchicine induced autotetraploids of Cicer arietinum L. *Cytologia*, 37: 415-420.

*Priszter, S. (1949). *Hybrides d' Amaranthus*. *Index Hort. Bot. Univ. Budapest*, 7: 116-149.

Po'lya (1949). *Chromosome numbers of flowering plants.* (ed. Fedorov, 1974). *Ottokoeltz Science Publishers*, D-624, Koenigstein, W.Germany, pp. 19-20.

- Power, J.B. and Chapman, J.V. (1985). Isolation, culture and genetic manipulation of plant protoplasts. In: Plant cell culture- a practical approach (ed. R.A.Dixon). Information printing, Oxford, pp. 37-66.
- Power, J.B., Cumming, S.E. and Cocking, E.C. (1970). Fusion of isolated plant protoplasts. *Nature*, 253: 1016-1018.
- Pundir, R.P.S., Rao, N.K. and Vander Maesen, L.J.G. (1983). Induced autotetraploidy in chickpea (Cicer arietinum L.) *Theo. Appl. Genet.*, 65: 119-122.
- Raghuvanshi, S.S. and Joshi, S. (1964). Cytomorphological studies on the colchipooids of Capsicum frutescence. *Cytologia*, 29: 61-78.
- Ramanna, M.S. and Natarajan, A.T. (1965). Studies on the relative mutagenic efficiency of alkylating agents under different conditions of treatment. *Ind. J.Genet.*, 25: 24-45.
- Rao, R.N. and Natarajan, A.T. (1965). Mutagenicity of some alkyl alkane sulfonates in barley. *Mutat. Res.*, 2: 132-148.
- Reinhard, M.F. (1973). IOPB Chromosome number reports. *Taxon*, 22(4): 459-464.
- Riley, R. and Chapman, V. (1958). Genetic control of the cytologically diploid behaviour of hexaploid Wheat. *Nature*, 182: 713.
- _____ and Law, C.N. (1965). Genetic variation in chromosome pairing. *Adv. Genet.*, 13: 57-114.
- Rina Das, Suman, B., Venkateswarlu, K. and Sapory, S.K. (1987). Involvement of polyphosphoinositide cycle and calmodulin in cell proliferation and in vitro regeneration of plants in Amaranthus paniculatus. In: Proc. Symp. Plant cell and tissue culture of economically important plants (ed. G.M.Reddy). Hyderabad, India, pp. 323-326.

- Roy, R.P. (1959). Genome analysis of Aegilops sharonensis. *Genetica*, 29: 331-357.
- Santapau, H. and Henry, A.N. (1973). A dictionary of the flowering plants in India. C.S.I.R., New Delhi.
- Sauer, J.D. (1950). The grain amaranths: a survey of their history and classification. *Ann. Missouri Bot. Gard.*, 37: 561-632.
- _____ (1955). Revision of the dioecious amaranths. *Madrono*, 13: 5-46.
- _____ (1957). Recent migration and evolution of dioecious amaranths. *Evolution*, 11: 11-31.
- _____ (1967). The grain amaranths and their relatives: a revised taxonomic and geographic survey. *Ann. Missouri Bot. Gard.*, 54: 103-137.
- Schinz, H. (1934). *Amaranthaceae*. In: Engler, A. and Prantl, K. *Die naturlichen Pflanzen familien*. 16C: 7-85.
- *Schwanitz, F. (1940). Polyploid and Pflanzenzuchtung. *Naturwise*, 28:353-361.
- Sen, N.K. and Chedda, H.R. (1958). Colchicine induced tetraploids of five varieties of black gram. *Ind. J. Genet.*, 18:238-248.
- Sharma, A.K. and Banik, M. (1965). Cytological investigation of different genera of *Amaranthaceae* with a view to trace their relationship. *Bull. Bot. Soc. Bengal*, 19: 40-50.
- Singh, A. and Roy, R.P. (1971). Studies on the colchiploids of four species of Trigonella. *Cytologia*, 36(1): 133-142.
- Singh, A.K. (1986). Utilization of wild relatives in the genetic improvement of Arachis hypogaea L. 7: Autotetraploid production and prospects in inter specific breeding. *Theo. Appl. Genet.*, 72: 164-169.

- Smith, H.H. (1939). The induction of polyploidy in Nicotiana species and species hybrids by treatment with colchicine. *Genetics*, 24: 85-86.
- Smith, A.T. and Stebbins, G.L. (1971). A morphological and histological study of the tomato mutant 'curl'. *Am.J. Bot.* 58: 517-524.
- Standley, P.C. (1917). *Amaranthaceae*. In: *North Am. Flora*, 21 : 95-169.
- Stebbins, G.L. (1971). *Chromosomal evolution in higher plants*. Edward Arnold (Publishers) Ltd. London.
- Stoy, V. and Hagberg, A. (1958). Effect of gibberellic acid on erectoides mutations in barley. *Hereditas*, 44: 512-522.
- Subramanyam, K. (1966). Chromosome numbers of flowering plants (ed. Fedorov, 1974). Ottokoeltz Science publishers, D-624, Koenigstein, W.Germany, pp. 19-20.
- Swanson, C.P. (1957). *Cytology and Cytogenetics*. Prentice Hall Inc. N.J.
- Sybenga, J. (1969). Allopolyploidization of autotetraploids I. Possibilities and limitations. *Euphytica*, 18: 355-371.
- *Takagi, T. (1933). Uber die chromosomenzah lenbeieinigen Amaranthus-Arten. *Bot. Mag. Tokyo*, 47: 556-557.
- Tal, M. (1980). Physiology of polyploids. In : *Polyploidy, Biological relevance* (ed. W.H.Lewis). Plenum Press, New York, pp. 61-76.
- Tandon, S.L. and Chinoy, J.J. (1950). Colchicine induced polyploidy in Amaranthus blitum. *Sci. and Cult. (India)*, 15: 398.

Tandon, S.L. and Tawakley, M. (1970). IOPB chromosome number reports. *Taxon*, 19: 264-269.

_____ (1971). Cytotaxonomic studies in Amaranthus, chenopodium and Atriplex. Ph.D. thesis, Delhi University.

Thakare, R.G., Joshua, D.C. and Rao, N.S. (1973). Induced viable mutations in Corchorus olitorius L. *Ind. J. Genet.*, 33: 204-228.

*Thellung, A. (1914). Amaranthus. In: F.Ascherson and P.Graebner, *Synopsis der Mitte leuropaischen flora*, 5: 225-356.

*_____ (1928). Amaranthus ruebelli X gracilis. *Hybr. nov. Rept. Spec. nov. reg. veg.*, 24: 299-301.

Townsend, C.C. (1974). Amaranthaceae. In: *Fl. West Pakistan* (ed. S.I.Ali and N.Nasir). Fasc. 71: 7-21.

Tucker, J.N. and Sauer, J.D. (1958). Aberrant Amaranthus populations of sacramento sanjoasquin delta, California. *Madrono*, 14: 252-261.

Uchimiya, H. and Murashige, T. (1974). Evaluation of parameters in the isolation of viable protoplasts from cultured tobacco cells. *Plant. Physiol.*, 54: 936-944.

Upcott, M. (1939). The nature of tetraploidy in Primula kewensis. *J. Genet.* 35: 79-100.

Vavilov, N.I. (1950). The Origin, variation, immunity and breeding of cultivated plants. *Chronica Bot.*, 13: 364.

Walton, P.D. (1968 a). The use of genus Amaranthus in genetic studies. *J. Hered.* 59(1): 76-78.

_____ (1968 b). The use of Amaranthus caudatus in stimulating the breeding behaviour of commercial Gossypium species. *J. Hered.* 59(1): 17-18.

Westergaard, M. (1958). The mechanism of sex determination in dioecious flowering plants. *Adv. in Genet.*, 9: 217-281.

White, O.E. (1948). Fasciation. *Bot. Rev.*, 14: 319-358.

Zeven, A.C. (1980). Polyploidy and domestication: The origin and survival of polyploids in cytotype mixture. In: *Polyploidy, Biological relevance* (ed. W.H.Lewis): Plenum Press, New York, pp. 385-407.

Zimmermann, U. and Scheurich, P. (1981). High frequency fusion of plant protoplasts by electric fields. *Planta*, 151: 26-32.

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