

#### IV. RECENT MAIZE PUBLICATIONS

- Alexander, D. E. Microsporogenesis of maize monoploids. Abstracts, 1953 Ann. Meetings, Amer. Soc. Agron. p. 78. 1953.
- Anderson, Edgar, and W. L. Brown. The popcorns of Turkey. Ann. Mo. Bot. Gard. 40:33-48. 1953.
- Andrew, R. H. The influence of depth of planting and temperature upon stand and seedling vigor of sweet corn strains. Agron. Jour. 45:32-35. 1953.
- . Short first internode in maize. Jour. Heredity 44:146-148. 1953.
- Arnold, C. R. F. Maize in South Africa. Brit. Agr. B. 5:151-154. 1952.
- Basile, R. M. Drought in relation to corn yield in the Northwestern corner of the corn belt. Agron. Jour. 46:4-7. 1954.
- Bauman, L. F. Results of further inheritance studies on the Kys type of cytoplasmic male sterility in corn. Abstracts, 1953 Ann. Meetings, Amer. Soc. Agron. p. 79. 1953.
- Boewe, G. H. Stewart's disease prospects for 1953. Plant Dis. Reprtr. 37:311-312. 1953.
- Bonnett, O. T. Developmental morphology of the vegetative and floral shoots of maize. Bul. 568, Illinois Agric. Expt. Sta. 47 pp. 1953.
- Brown, W. L. A summary of maize breeding techniques. Trop. Agric. 30:86-96. 1953.
- Brown, W. N. Developmental morphology of pericarp blistering in sweet corn. Mich. U. Diss. Abs. 13:3. 1953.
- Cameron, J. W., and H. J. Teas. Carbohydrate relationships in developing and mature endosperms of brittle and related maize genotypes. Amer. Jour. Bot. 41:50-55. 1954.
- Catcheside, D. G. "Affinity" in maize. Nature 172:112-113. 1953.
- Dunn, G. M., H. H. Kramer, and Roy L. Whistler. Gene dosage effects on corn endosperm carbohydrates. Agron. Jour. 45:101-104. 1953.
- Eckhardt, R. C. A technic to simultaneously incorporate male sterile cytoplasm and restorer factor(s) into inbred lines of maize. (Abs.) Assoc. Sout. Agric. Workers Proc. 50:42. 1953.
- Eden, W. G. Effects of kernel characteristics and components of husk cover on rice weevil damage to corn. Jour. Econ. Ent. 45:1084-1085. 1952.

- Emerson, R. A. A preliminary survey of the milpa system of maize culture as practiced by the Maya Indians of the northern part of the Yucatan Peninsula. *Ann. Mo. Bot. Gard.* 40:51-62. 1953.
- Eyster, H. C., and T. E. Brown. Effects of certain inorganic ions on corn leaf catalase. *Ohio Jour. Sci.* 53:101-104. 1953.
- Fairchild, R. S. Comparative development of the embryos of inbred and hybrid maize. *Iowa State Col. Jour. Sci.* 27:381-405. 1953.
- Ferwerda, F. P. Methods of synchronizing the flowering time of the components in crossing plots for the production of hybrid seed corn. *Euphytica* 2:127-134. 1953.
- Findley, W. R., and L. E. Campbell. Ultrasonic treatments of dormant hybrid corn seed. *Agron. Jour.* 45:357-358. 1953.
- Ford, Lee. Cytogenetic study of a mutant maize F<sub>1</sub> plant from homozygous diploid x tester. *Jour. Heredity* 44:17-20. 1953.
- . A cytogenetic comparison of maize monoploid derivatives and inbreds. *Agron. Jour.* 46:34-36. 1954.
- Galinat, W. C. The genetics and morphology of corn grass, a macromutant of maize. (Abs.) *Genetics* 38:663. 1953.
- and R. H. Andrew. Stolon-producing corn. *Agron. Jour.* 45:122. 1953.
- Gardner, C. O., P. H. Harvey, R. E. Comstock, and H. F. Robinson. Dominance of genes controlling quantitative characters in maize. *Agron. Jour.* 45:186-191. 1953.
- Gutierrez, G. M. Factors affecting randomness of mating in isolated polycross plantings of maize. (Abs.) *Iowa State Col. Jour. Sci.* 27:183-184. 1953.
- Harris, Robert, and Bernard Phinney. Auxin relations in a dwarf-1 allele of *Zea mays*. (Abs.) *Genetics* 38:667. 1953.
- Haskell, Gordon. The control of interpollination between sweet and flint corn. *Ann. Bot. (n. s.)* 17:81-93. 1953.
- . The graphic evaluation of a breeding system. *Heredity* 7:239-245. 1953.
- . Heterosis and adaptability. *Rept. 13 Intern. Hort. Congr.* 1:365-374. 1953.
- . Harvesting inbred and hybrid sweet corn seed in England. *Jour. Sci. Food & Agric.* 4:433-439. 1953.
- . Adaptation of sweet corn to English climatic, edaphic, and biotic factors. *Plant and Soil*: November, 1953.

- Hay, R. E., E. B. Earley, and E. E. DeTurk. Concentration and translocation of N compounds in the corn plant during grain development. *Plant Phys.* 28:606-621. 1953.
- Hofmeyr, J. D. J. The origin and history of maize. *Farming So. Africa* 27:451-452. 1952.
- Hoppe, P. E. Northern corn leaf blight in Wisconsin in 1952. *Plant Dis. Reprtr.* 37:94. 1953.
- Ibrahim, M. A. E. Association tests between chromosomal interchanges in maize and resistance to the European corn borer. *Diss. Abs.* 13:285-286. 1953.
- Jeffreys, M. D. W. Maize and its Old World introduction. *So. African Jour. Sci.* 49:322-324. 1953.
- Johnson, L. F. Control of root rot of corn under greenhouse conditions by microorganisms antagonistic to *Pythium arrhenomanes*. (Abs.) *Phytopath.* 42:468. 1952.
- Johnson, I. J., and J. C. Eldredge. Performance of recovered popcorn inbred lines derived from outcrosses to dent corn. *Agron. Jour.* 45:105-110. 1953.
- Josephson, L. M. "Crazy-top" of maize in South Africa. *Farming So. Africa* 29:4, 36. 1953.
- Jugenheimer, R. W. Evaluation of genetic male sterility in the hybrid corn programs Amer. Seed Trade Assoc. Hybrid Corn Div., Industry Res. Conf. Ann. Rept. 6:25-28. 1952.
- . Rough dwarf of maize in Italy and Switzerland. *FAO Plant Protect. Bull.* 1:44. 1952.
- and Silow, R. A.. Cooperative hybrid maize tests in European and Mediterranean countries, 1951. FAO development paper 35. FAO, United Nations. 145 pp. 1953.
- and Mao, Y. T. Cooperative hybrid maize tests in European and Mediterranean countries, 1950. FAO development paper No. 31. FAO, United Nations, 43 pp. 1952.
- . Essais cooperatifs sur le maïs hybride en Europe et dans le bassin méditerranéen, 1950. Collection FAO: Progres et mise en valeur-Cahier N. 31. Organisation des Nations Unies pour l'Alimentation et l'Agriculture. 45 pp. 1953.
- Jugenheimer, R. W., Kjaer, A., and R. A. Silow. Report of the sixth FAO hybrid maize meeting, Lisbon, Portugal, 9-14 February, 1953. FAO United Nations. 57 pp. 1953.

- \_\_\_\_\_. Minimum seed certification standards for maize in European and Mediterranean countries. FAO, United Nations. 15 pp. 1953.
- Jugenheimer, R. W., L. F. Bauman, and D. E. Alexander. Experimental corn hybrids tested in 1953. Ill. Agric. Expt. Sta. Bull. 572:23 pp. 1954.
- Kopf, K. Inheritance and inter-relationships of some maize ear characters. (Abs.) Iowa State Col. Jour. Sci. 27:203-204. 1953.
- Laughnan, John R. The effect of the  $sh_2$  factor on carbohydrate reserves in the mature endosperm of maize. Genetics 38:485-499. 1953.
- Ledin, R. B. The negative shoot apex in *Zea mays*. Amer. Jour. Bot. 41:11-17. 1954.
- Leeper, P. W., G. P. Wene, and R. A. Blanchard. Effect of ear worm treatment on size of sweet corn ears. Proc. Amer. Soc. Hort. Sci. 61:413-416. 1953.
- Leng, Earl R. Expression of heterosis and apparent degree of dominance in the major components of grain yield in maize. (Abs.) Genetics 38:674-675. 1953.
- \_\_\_\_\_. Effect of heterosis on the major components of grain yield in corn. Abstracts, 1953 Ann. Meetings, Amer. Soc. Agron. p. 94. 1953.
- \_\_\_\_\_ and C. M. Woodworth. Effects of long-continued selection for oil and protein content in maize. (Abs.) Genetics 38:675. 1953.
- Lonquist, John H. Heterosis and yield of grain in maize. Agron. Jour. 45:539-542. 1953.
- Marre, E., and A. E. Murneek. The effects of fertilization and growth-regulating substances on carbohydrate and hexose phosphate metabolism during the early stages of growth of corn kernels. Science 117:661-663. 1953.
- Matzinger, Dale F. Comparison of three types of testers for the evaluation of inbred lines of corn. Agron. Jour. 45:493-495. 1953.
- McClintock, Barbara. Mutable loci in maize. Carnegie Inst. Wash. Year Book No. 51:212-219. 1952.
- \_\_\_\_\_. Induction of instability at selected loci in maize. Genetics 38:579-599. 1953.
- McKeen, W. E. Preliminary studies of root and basal stalk rot of maturing corn in Ontario. Canad. Jour. Bot. 31:132, 141. 1953.
- Melhus, I. E., F. Aguirre, and N. S. Schrimshaw. Observations on the nutritive value of teosinte. Science 117:34-35. 1953.

- Melsted, S. W. Some observed calcium deficiencies in corn under field conditions. *Soil Sci. Soc. Amer. Proc.* 17:52-54. 1953.
- Mes, M. G. On possible cultural methods of speeding up breeding experiments with maize. I. The influence of length of day, night temperature, and vernalization on flowering. *So. African Jour. Sci.* 49:221-224. 1953.
- II. The use of immature seed. *So. African Jour. Sci.* 49:303-307. 1953.
- Moster, J. B., and F. W. Quackenbush. The effects of temperature and light on the carotenoids of seedlings grown from three corn hybrids. *Arch. Biochem. and Biophys.* 38:297-303. 1952.
- and J. W. Porter. The carotenoids of corn seedlings. *Arch. Biochem. and Biophys.* 38:287-296. 1952.
- Nakamura, N., and S. Tate. On the F<sub>1</sub> hybrid seed corn production used advanced generation as parents (In Japanese). *Jap. Jour. Breeding* 2:142-146. 1953.
- Nelson, Oliver E. A genic substitute for isolation in hybrid corn seed production. *Economic Bot.* 7:382-384. 1953.
- Nickerson, N. H. Variation in cob morphology among certain archaeological and ethnological races of maize. *Ann. Mo. Bot. Gard.* 40:79-111. 1953.
- Patton, A. R. Methionine content of teosinte. *Science* 118:725. 1953.
- Peterson, Peter A. A mutable pale green locus in maize. (Abs.) *Genetics* 38:682. 1953.
- Plaut, W. S. The effect of B chromosomes on the variegated pericarp phenotype in maize. *Amer. Jour. Bot.* 40:344-348. 1953.
- Punnett, Hope. Cytological evidence of hexaploid cells in maize endosperm. *Jour. Heredity* 44:257-259. 1953.
- Rabideau, G. S., and L. W. Mericle. The distribution of C-14 in the root and shoot apices of young corn plants. *Plant Phys.* 329-333. 1953.
- Reeves, R. G. New "evidence" on the origin of maize. *Amer. Nat.* 87:157-159. 1953.
- Morphology of plant organs related to the maize ear. *Amer. Jour. Bot.* 40:266-271. 1953.
- Reilly, J. J. Correlation of seedling blight to stalk rot and nature of seedling resistance to *Diplodia zeae*. (Abs.) *Phytopath* 42:473. 1953.
- Rhoades, M. M., and Ellen Dempsey. Cytogenetic studies of deficient-duplicate chromosomes derived from inversion heterozygotes in maize. *Amer. Jour. Bot.* 40:405-424. 1953.

- Robbins, J. S., and C. E. Domingo. Some effects of severe soil moisture deficits at specific growth stages of corn. *Agron. Jour.* 45:618-621. 1953.
- Robinson, H. F. Estimation and application of genetic variances in corn. *Alfalfa Impr. Conf. Rpt.* 13:25-26. 1952.
- Robert, Alice L., and W. R. Findley. Diseased corn leaves as a source of infection in artificial and natural epidemics of *Helminthosporium turcicum*. *Plant Dis. Rptr.* 36:9-10. 1952.
- Rogers, J. S. Use of male-sterile stocks in the production of corn hybrids, *Amer. Seed Trade Assoc. Hybrid Corn Div. Rpt. Hybrid Corn Indus. Res. Conf.* 7:7-15. 1952.
- Rowell, J. B., and J. E. DeVray. Factors affecting the partial vacuum inoculation of seedling corn with *Ustilago zaeae*. *Phytopath.* 43:654-658. 1953.
- Schwartz, Drew. An interesting phenomenon associated with irradiation of dry maize seeds. *Science* 119:45-46. 1954.
- \_\_\_\_\_. The behavior of an X-ray induced ring chromosome in maize. *Amer. Nat.* 87:19-28. 1953.
- \_\_\_\_\_. Evidence for sister-strand crossing over in maize. *Genetics* 38:251-260. 1953.
- Suto, T. Genetic analysis of a mosaic pericarp in maize, with special reference to the genic change of the color pattern induced by the possible unequal crossing-over in a small region containing the P locus and its neighbors of chromosome 1. *Hokkaido U. Fac. Sci. Jour. Bot.* 6:67-150. 1952.
- \_\_\_\_\_. Analysis of polymeric genes controlling a new form of dotted leaves in maize. *Hokkaido U. Fac. Sci. Jour. Bot.* 6:151-177. 1952.
- \_\_\_\_\_, Y. Kato, and N. Mukaigawa. A genic survey of heritable characters in maize. I. Some new mutants. *Hokkaido U. Fac. Sci. Jour. Bot.* 6:178-198. 1952.
- Tatum, L. A. Seed permeability and cold test reaction in *Zea mays*. *Agron. Jour.* 46:8-10. 1954.
- Taylor, G. S. Nutritive value of cornstalk juice inversely related to stalk rot (*Diplodia zaeae*) resistance. (Abs.). *Phytopath.* 42:476. 1952.
- Teas, H. J., and Anna N. Teas. Heritable characters in maize -- description and linkage of brittle endosperm-2. *Jour. Heredity* 44:156-158. 1953.
- Tulpule, S. H. A study of pleiotropic genes in *Zea mays*. *Mich. U. Diss. Abs.* 13:10-11. 1953.

Viets, F. G., et al. Zinc deficiency in corn in Central Washington. Agron. Jour. 45:559-565. 1953.

Warren, J. R. A study of Stewart's disease of corn with special reference to factors related to resistance and susceptibility. Ohio State U. Abs. Doct. Diss. 64:535-541. 1953.

Wellhausen, E. J., L. M. Roberts, E. Hernandez, and P. C. Mangelsdorf. Races of maize in Mexico -- their origin, characteristic and distribution. Bul. of the Bussey Institution of Harvard U. 223 pp. 1952.

Wernham, C. Of the mass production of blight-resistant corn. Plant Dis. Rptr. 37:138-141. 1953.

Williams, J. H. Crop variety response to exogenous growth regulators. II. Inheritance of differential response in corn and oats. (Abs.) Iowa State Col. Jour. Sci. 27:278-279. 1953.

\_\_\_\_\_. Differential varietal response of root tissues to exogenous growth regulators in soybeans, oats and corn. Agron. Jour. 45:293-297. 1953.

\_\_\_\_\_ and I. J. Johnson. Inheritance of differential response of corn root tissues to 2,4-D. Agron. Jour. 45:298-301. 1953.

Withrow, R. B., W. H. Klein, L. Price, and V. Elstad. Influence of visible and near infrared radiant energy on organ development and pigment synthesis in bean and corn. Plant Phys. 28:1-14. 1953.

Yarnell, S. H. Breeding sweet corn for resistance to the corn earworm. Amer. Soc. Hort. Sci. Proc. 60:379-386. 1952.

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