

V. RECENT MAIZE PUBLICATIONS

- Alexander, D. E., J. W. Dudley, and R. G. Creech. Corn breeding and genetics. Ch. 2, pp. 6-23 from Corn: Culture, Processing, Products. Avi Publ. Co., Westport, Conn. 1970.
- Alexander, D. E., J. W. Dudley and R. J. Lambert. The modification of protein quality of maize by breeding. Acta Agron. Acad. Sci. Hung. 19:435-442. 1970.
- Alexander, D. E., J. W. Dudley, and R. J. Lambert. The modification of protein quality of maize by breeding. From: Proc. 5th Meeting of Maize-Sorghum Sect. of Eucarpia. Pp. 33-43. Publ. by Akad. Kiado, Budapest. 1971.
- Alexander, D. E., J. W. Dudley, and R. J. Lambert. Corn as a producer of high quality protein. Preprints Am. Chem. Soc. 14 (4): B19-21. 1969.
- Alexander, D. E., R. J. Lambert, and J. W. Dudley. Breeding problems and potentials of modified protein maize. From "New approaches to breeding for improved plant protein." Int'l. Atomic Energy Cong. Vienna. Pp. 55-65. 1969.
- Anglade, P. and S. Rautou. Programme and preliminary results of breeding maize for resistance to corn borer. CR Acad. Sci. Paris 56: 389-396. 1970.
- Annapurna, S. and G. M. Reddy. Modified opaque maize for possible applied use. Curr. Sci. 40 (21):581-582. 1971.
- Arnold, J. M., L. M. Josephson, J. R. Overton, and S. E. Bennett. Cultural control of the southwestern corn borer. Tenn. Agr. Exp. Sta. Bull. 466. 1970.
- Army, D. C., E. B. Smalley, A. J. Ullstrup, G. L. Worf, and R. W. Ahrens. Eyespot of maize, a disease new to North America. Phytopath. 61:54-57. 1971.
- Asnani, V. L. and B. Bhusan. Inheritance study on the brown stripe downy mildew of maize. Indian Phytopath. 23:220-230. 1970.
- Avila, G. Identifying monoploids in maize with the marker R^{SC} in plants treated with mutagens. Genetica Agraria 25:131-140. 1971.
- Avila, G. Opaque-2 presence in Bolivian corn varieties. Genetica Agraria 25:140-145. 1971.
- Ayonoadu, U. W. and H. Rees. The effects of B chromosomes on the nuclear phenotype in root meristems of maize. Heredity 27:365-385. 1971.

- Baldwin, J. G. and K. R. Barker. Histopathology of corn hybrids infected with root knot nematode, Meloidogyne incognita. Phytopath. 60:1195-1198. 1970.
- Banerjee, U. C. and E. S. Barghoorn. The tapetal membranes in grasses and Ubisch body control on mature exine pattern. In Pollen: Development and Physiology. Ed. by J. Heslop-Harrison, Butterworth, London. Pp. 338. 1971.
- Barry, B. D., L. R. Nault, and W. R. Findley. Evaluation of corn hybrids in Ohio for resistance to northern corn leaf blight, Helminthosporium turcicum Passerini, and expression of kernel red streak. Res. Circ. Ohio Agric. Res. Devel. Cent. No. 180: 3-12. 1970.
- Beckett, J. B. Classification of male-sterile cytoplasm in maize (Zea mays L.). Crop Science 11:724-727. 1971.
- Bell, D. T., D. E. Koeppe, and R. J. Miller. The effects of drought stress on respiration of isolated corn mitochondria. Plant Physiol. 48:413-415. 1971.
- Bhat, B. K. and N. L. Dhawan. The role of cytoplasm in the manifestation of quantitative characters of maize. Genetica 42:165-174. 1971.
- Bljandur, O. V. Chemical mutagenesis in maize. Bull. Acad. Sci. Moldav. SSR 1968: 17-27. 1968.
- Brewbaker, J. L. Breeding tropical supersweet corn. Hawaii Farm Sci. 20: 7-10. 1971.
- Brown, A. H. D. and R. W. Allard. Effect of reciprocal recurrent selection for yield on isozyme polymorphisms in maize (Zea mays L.). Crop Sci. 11: 888-893. 1971.
- Brown, R. P., R. G. Creech and L. J. Johnson. Genetic control of starch granule morphology and physical structure in developing maize endosperms. Crop Sci. 11: 297-302. 1971.
- Burton, J. W., L. H. Penny, A. R. Hallauer, and S. A. Eberhart. Evaluation of synthetic populations developed from a maize variety (BSK) by two methods of recurrent selection. Crop Sci. 11: 361-365. 1971.
- Cabulea, I. and E. Ottaviano. The genetic control of variations in grain weight and protein content of opaque-2 maize (o₂). Atti Assoc. Genet. Ital. 16: 67-68. 1971. (Abstr.)
- Cabulea, I., G. Illyes and C. Bilaus. Some aspects of the heritability of the carotenoids in the maize grain. Genet. Agr. Pavia 24: 105-120. 1970.

- Carangal, V., M. Claudio, and M. Sumayao. Breeding for resistance to maize downy mildew caused by Sclerospora philippinensis in the Philippines. *Indian Phytopath.* 23: 285-306. 1970.
- Carangal, V. R., S. M. Ali, A. F. Koble, E. H. Rinke, and J. C. Sentz. Comparison of S_1 with testcross evaluation for recurrent selection in maize. *Crop Sci.* 11: 658-662. 1971.
- Chandrasekhar, V. S. G. and G. M. Reddy. Specific locus mutations in maize by chemical mutagens. *Curr. Sci.* 40 (6): 136-137. 1971.
- Chandravadana, P., W. C. Galinat and B. G. S. Rao. A cytological study of Tripsacum dactyloides. *J. Heredity* 62: 280-284. 1971.
- Chang, C. C. and G. Y. Kikudome. Cytogenetic studies on a maize chromosome 9 knob of Mexican origin. *Genetics* 68: sl1. 1971. (Abstr.)
- Chang, S. C. A review of studies on downy mildew of maize in Taiwan. *Indian Phytopath.* 23: 270-274. 1970.
- Chao, S. E. and J. G. Scandalios. Alpha-amylase of maize: Differential allelic expression at the Amy-1 gene locus, and some physico-chemical properties of the isozymes. *Genetics* 69: 47-61. 1971.
- Chatterjee, N. K. and C. O. Gardner. Analysis of two enzyme proteins in some genotypes of corn (Zea mays L.). *Crop Sci.* 11: 387-390. 1971.
- Chaudhry, A. R. and S. B. Helgason. Photoperiodic responses of maize. *Pakist. J. Sci.* 20: 257-261. 1968.
- Chourey, P. S. Interallelic complementation at the Sh₁ locus in maize. *Genetics* 68: 435-442. 1971.
- Cloninger, F. D., M. S. Zuber, O. H. Calvert, and P. J. Loesch, Jr. Methods of evaluating stalk quality in corn. *Phytopath.* 60 (2): 295-300. 1970.
- Coe, E. H., Jr. and C. Mouli. Mottling in maize through chance determination of an unfixed clonal state. *Genetics* 68: sl2. 1971. (Abstr.)
- Cummins, D. G. and M. D. Jellum. Silage yields of adapted corn hybrids, crib corn, and Argentine flints in 1971. *Georgia Agr. Res.* 13: 6-7. 1971.
- Dahmen, W. J. and J. J. Mock. Sterilization techniques for seeds and excised embryos of corn (Zea mays L.). *Iowa State Journal of Sci.* 46: 7-11. 1971.

- Dalby, A. and G. B. Cagampang. Ribonuclease activity in normal, opaque-2, and floury-2 maize endosperm during development. *Plant Physiol.* 46: 142-144. 1970.
- Dankov, T. and T. Karapanova. On the asexual transfer of cytoplasm causing male sterility. *CR Acad. Sci. Agric. Bulg.* 3: 239-246. 1970.
- Day, P. R. and S. L. Anagnostakis. Corn smut dikaryon in culture. *Nature New Biol. London* 231: 19-20. 1971.
- Day, P. R., S. L. Anagnostakis, and J. E. Puhalla. Pathogenicity resulting from mutation at the b locus of Ustilago maydis. *Proc. Nat. Acad. Sci. USA* 68: 533-535. 1971.
- De La Roche, I. A., D. E. Alexander, and E. J. Weber. Inheritance of oleic and linoleic acids in Zea mays L. *Crop Sci.* 11: 856-860. 1971.
- De La Roche, I. A., E. J. Weber, and D. E. Alexander. Genetic aspects of triglyceride structure in maize. *Crop Sci.* 11: 871-874. 1971.
- De La Roche, I. A., E. J. Weber, and D. E. Alexander. Effects of fatty acid concentration and positional specificity on maize triglyceride structure. *Lipids* 6: 531-536. 1971.
- De La Roche, I. A., E. J. Weber, and D. E. Alexander. The selective utilization of diglyceride species into maize triglycerides. *Lipids* 6: 537-540. 1971.
- De Leon, C. Advances in the selection of downy mildew resistant materials in Mexico. *Indian Phytopath.* 23: 339-341. 1970.
- De Wet, J. M. J., R. J. Lambert, J. R. Harlan and S. M. Naik. Stable triploid hybrids among Zea-Tripsacum-Zea backcross populations. *Caryologia* 23: 183-187. 1970.
- Dmitrieva, A. N., O. E. Havzinskaja, L. R. Borisenko, and L. M. Luk'Janenko. Physiological properties of sterility maintainers and fertility restorers in maize. *Sel'skhoz. Biol.* 5: 663-668. 1970.
- Dooner, H. K. and J. L. Kermicle. Structure of the R^T tandem duplication in maize. *Genetics* 67: 427-436. 1971.
- Doyle, G. G. Tandem duplications from translocations between homologous chromosomes in maize. *Genetics* 68: s16. 1971. (Abstr.)
- Dudley, J. W., R. J. Lambert and D. E. Alexander. Variability and relationship among characters in Zea mays L. synthetics with improved protein quality. *Crop Sci.* 11: 512-514. 1971.

- Eberhart, S. A. Regional maize dialleles with U.S. and semi-exotic varieties. *Crop Sci.* 11: 911-914. 1971.
- Efron, Y. Regulation of the activity of alcohol dehydrogenase isozymes during the development of the maize kernels. *Mol. Gen. Genetics* 111: 97-102. 1971.
- El-Lakany, M. A. and W. A. Russell. Relationship of maize characters with yield in testcrosses of inbreds at different plant densities. *Crop Sci.* 11: 698-701. 1971.
- El-Lakany, M. A. and W. A. Russell. Effectiveness of selection in successive generations of maize inbred progenies for improvement of hybrid yield. *Crop Sci.* 11: 703-706. 1971.
- Empig, L. T., C. O. Gardner, and W. A. Compton. Theoretical gains for different population improvement procedures. *Nebr. Agr. Exp. Sta. Misc. Pub.* 26. 1971.
- Felder, M. R. and J. G. Scandalios. Effects of homozygosity and heterozygosity on certain properties of genetically defined electrophoretic variants of alcohol dehydrogenase isozymes in maize. *Mol. Gen. Genetics* 111: 317-326. 1971.
- Ferguson, V. L., J. L. Helm, M. S. Zuber and M. L. Fairchild. Angoumois grain moth: a tool in high-amylose corn breeding. *J. Econ. Entom.* 63: 1255-1257. 1970.
- Fery, R. L. and J. Janick. Response of corn (*Zea mays* L.) to population pressure. *Crop Sci.* 11: 220-225. 1971.
- Fischbeck, G. Cytology and genetics in maize breeding. *Bayer. Landw. Jb.* 47: 912-956. 1970.
- Fleming, A. A. Effect of cytoplasm on southern leaf blight of corn. *Plant Dis. Repr.* 55: 473-475. 1971.
- Fleming, A. A. Performance of stocks within long-time inbred lines of maize in testcrosses. *Crop Sci.* 11: 620-622. 1971.
- Fleming, A. A. What's behind southern corn leaf blight? *Georgia Agr. Res.* 12 (No. 3): 11-13. 1971.
- Fleming, A. A. The southern corn leaf blight and where do we go from here? *Proc. Ann. Seed Short Course, Georgia Seed Technology and Development Center* (1971): 23-27.
- Fleming, A. A. and H. L. Jaggi. Male and female cytoplasmic effects in double-cross maize hybrids. *ASA Agron. Abstracts* (1970): 9.
- Fleming, A. A. and G. M. Kozelnicky. Having difficulty with sweet corn? *Georgia Agr. Res.* 12 (No. 4): 3-4. 1971.

- Ford, L. Meiosis in monoploid Zea mays microsporocytes. *Nucleus*, Calcutta 13: 70-76. 1970.
- Fromberg, H. K., W. Christ, and W. G. Pollmer. A rapid method based on butanol extraction for selecting high-lysine maize (Zea mays L.). *Crop Sci.* 11: 567-570. 1971.
- Galinat, W. C. The origin of maize. *Ann. Rev. Genetics* 5: 447-475. 1971.
- Galinat, W. C. The evolution of sweet corn. *Mass. Agr. Exp. Sta. Bull.* 591: 1-20. 1971.
- Genter, C. F. Yields of S₁ lines from original and advanced synthetic varieties of maize.¹ *Crop Sci.* 11: 821-825. 1971.
- Genter, C. F. and K. W. King. Nutritive value of the protein in high-oil selections of maize. *Crop Sci.* 11: 339-341. 1971.
- Ghidoni, A. Identification of spontaneous aneuploids in maize. *Genetica Agraria* 24: 335-337. 1970.
- Gracen, V. E., M. J. Forster, and C. O. Grogan. Reactions of corn (Zea mays) genotypes and cytoplasms to Helminthosporium maydis toxin. *Plant Dis. Repr.* 55: 938-941. 1971.
- Gracen, V. E., M. J. Forster, K. D. Sayre, and C. O. Grogan. Rapid method for selecting resistant plants for control of Southern corn leaf blight. *Plant Dis. Repr.* 55: 469-470. 1971.
- Grogan, C. O. Multiplasm, a proposed method for the utilization of cytoplasms in pest control. *Plant Dis. Repr.* 55: 400-401. 1971.
- Grogan, C. O. and C. A. Francis. Influence of single recessive endosperm mutants on yield and dry matter distribution in maize (Zea mays L.). *Crop Sci.* 11: 302-303. 1971.
- Grogan, C. O. and R. B. Musgrave. New efficiency for corn plants. *Food and Life Sciences Quarterly* 4: 27-28. 1971.
- Grogan, C. O., C. A. Francis, and P. A. Sarvella. Effects of cytoplasmic male sterility and restoring factors on yield and morphology in inbred and hybrid maize (Zea mays L.). *Crop Sci.* 11: 295-297. 1971.
- Hallauer, A. R. Change in genetic variance for seven plant and ear traits after four cycles of reciprocal recurrent selection for yield in maize. *Iowa State J. of Sci.* 45: 575-593. 1971.
- Handoo, M. I., B. L. Renfro and M. M. Payak. On the inheritance of resistance to Sclerophthora rayssiae var. zeae in maize. *Indian Phytopath.* 23: 231-249. 1970.

- Hanson, W. D. Selection for differential productivity among juvenile maize plants. Associated net photosynthetic rate and leaf area changes. *Crop Sci.* 11: 334-339. 1971.
- Heichel, G. H. Genetic control of epidermal cell and stomatal frequency in maize. *Crop Sci.* 11: 830-833. 1971.
- Helm, J. L. and M. S. Zuber. Effect of harvest date on pericarp thickness in dent corn. *Canad. J. Pl. Sci.* 50: 411-413. 1970.
- Helm, J. L., A. V. Paez, P. J. Loesch, and M. S. Zuber. Test weight in high-amylose corn. *Crop Sci.* 11 (1). 1971.
- Henckel, P. A. Role of protein synthesis in drought resistance. *Canad. J. Bot.* 48: 1235-1241. 1970.
- Hilty, J. W. and L. M. Josephson. Southern corn leaf blight--a serious problem in corn production. *Tenn. Fm. Home Sci. No.* 76: 24-25. 1970.
- Hilty, J. W. and L. M. Josephson. Reaction of corn inbreds with different cytoplasms to Helminthosporium maydis. *Plant Disease Repr.* 55: 195-198. 1971.
- Hirose, S. and S. Toda. Studies on resistance of maize to Trichometasphaeria turcica. II. The genetics of resistance. *Res. Bull. Hokkaido Agric. Exp. Sta. No.* 96: 40-46. 1970.
- Hooker, A. L. and K. M. S. Saxena. Genetics of disease resistance in plants. *Ann. Rev. Genetics* 5: 407-424. 1971.
- Horocks, R. D. and M. S. Zuber. Corn shelling percentage studies. A. Ed., *U. Missouri Res. Bull.* 976. 1970.
- Hucklesby, D. P. Nitrate reduction by corn scutellum enzymes. *Plant Physiol.* 46: 45. 1970.
- Hughes, G. R. and A. L. Hooker. Gene action conditioning resistance to northern leaf blight in maize. *Crop Sci.* 11: 180-184. 1971.
- Ihrke, C. A. Cytological effects of crossover induction in maize. *Genetics* 68: s30. 1971. (Abstr.)
- Jaynes, T. A. and O. E. Nelson. Invertase activity in normal and mutant maize endosperms during development. *Plant Physiol.* 47: 623-628. 1971.
- Jellum, M. D. Fatty acid composition of corn endosperm and germ oils as influenced by different extraction procedures. *J. Am. Oil Chem. Soc.* 48: 355-357. 1971.

- Jellum, M. D. Effect of planting date and southern corn leaf blight on the fatty acid composition of corn oil. *Cereal Chem.* 48: 663-669. 1971.
- Jellum, M. D. and W. J. Ethredge. Effect of race T of Helminthosporium maydis on corn grain yield. *Agron. J.* 63: 647-648. 1971.
- Jellum, M. D., W. J. Ethredge, and C. W. Kuhn. Yield losses due to corn diseases. *Georgia Agr. Res.* 12: 14-16. 1971.
- Jellum, M. D., D. G. Cummins, and W. J. Ethredge. Grain yields of adapted corn hybrids, crib corn, and Argentine flints in 1971. *Georgia Agr. Res.* 13: 3-6. 1971.
- Johnson, G. R. Analysis of genetic resistance to maize dwarf mosaic disease. *Crop Sci.* 11: 23-24. 1971.
- Jones, L. P., W. A. Compton and C. O. Gardner. Comparison of full and half-sib reciprocal recurrent selection. *Theoretical and Applied Genetics* 41: 36-39. 1971.
- Josephson, L. M. Reductions in yield of corn from southern leaf blight. *Plant Dis. Repr.* 55: 115-118. 1971.
- Josephson, L. M. and J. W. Hilty. Response of corn hybrids to maize dwarf mosaic virus. *Tenn. Agr. Exp. Sta. Bull.* 469. 1970.
- Josephson, L. M. and B. Naidu. Reaction in diallel crosses of corn inbreds (Zea mays L.) to maize dwarf mosaic virus. *Crop Sci.* 11: 664-667. 1971.
- Josephson, L. M., C. R. Graves, H. C. Kincer, and J. W. Hilty. Reductions in yield of corn from southern corn leaf blight. *Plant Disease Repr.* 55: 115-118. 1971.
- Judin, B. F. On the capacity for parthenogenesis and the efficiency of selection for this character in diploid and autotetraploid maize. *Genetika Moskva* 6: 13-22. 1970.
- Kalsy, H. S. and D. Sharma. Study of genetic parameters and heterotic effects in crosses of maize (Zea mays L.) varieties with varying chromosome knob numbers. *Euphytica* 19: 522-530. 1970.
- Katsanos, R. A., A. J. Pappelis, J. N. BeMiller, and J. A. Tweedy. Parenchyma cell death in elongating corn cobs. *Crop Sci.* 11: 458-460. 1971.
- Koeppel, D. E. and R. J. Miller. Some effects of ducenylsuccinic acid on isolated corn mitochondria. *Plant Physiol.* 48: 659-662. 1971.
- Koul, A. K. Inheritance of ageotropy in annual teosinte. *J. Indian Bot. Soc.* 48: 217-220. 1969.

- Kovacs, I. Editor, Proceedings of the Fifth Meeting of the Maize and Sorghum Section of EUCARPIA, Akademiai Kiado, Budapest. Pp. 290. 1971.
- Kovacs, I. Advances in hybrid maize breeding at Martonvasar. In: Proceedings of the Fifth Meeting of the Maize and Sorghum Section of EUCARPIA. Akademiai Kiado, Budapest. Pp. 155-157. 1971.
- Kovacs, K. Zuchtung der Maishybriden Mv TC 290 und Mv SC 530. In: Bericht über die Arbeitstagung 1970 der "Arbeitsgemeinschaft der Saatzuchtler" im Rahmen der "Vereinigung österreichischer Pflanzenzüchter" Gumpenstein. Pp. 163-175. 1971.
- Kovacs, I. and M. Herczegh. Iszledovanyije szelekcionnoj cennosztji inbrednuh linyij. In: Szelekciija i Szemenovodszstvo Kukuruza. Izd. "Kolosz". Pp. 92-100. 1971.
- Kovacs, I., M. Herczegh, and L. Gaspar. Study on some properties of different high lysine lines, varieties and hybrids. In: Proceedings of the Fifth Meeting of the Maize and Sorghum Section of EUCARPIA. Akademiai Kiado, Budapest. Pp. 64-68. 1971.
- Kovalenko, V. F. Determination of the number of cells in root segments of hybrid, inbred and open-pollinated maize. Trans. Gorski Agric. Inst. 27: 204-208. 1967.
- Kravcenko, A. N. Study of the progeny of radiation macromutation of corngrass type. Bull. Acad. Sci. Moldav. SSR 1968: 83-91. 1968.
- Krstic, N. and N. Pesev. Investigation of restorer factors R_f frequency and stability in some domestic inbred lines of maize. Arch. Polopr. Nauk. 22: 81-86. 1969.
- Legg, J. G. and A. A. Fleming. A new brachyism and its inheritance in maize. Georgia Agron. Abstracts 15: 1. 1972.
- Levings, C. S. and C. W. Stuber. Oxidizable flavonoid difference in corn silks. Genetics 68: s38. 1971. (Abstr.)
- Levings, C. S., III, and C. W. Stuber. A maize gene controlling silk browning in response to wounding. Genetics 69: 491-498. 1971.
- Levings, C. S., III, J. W. Dudley, and D. E. Alexander. Genetic variance in autotetraploid maize. Crop Sci. 11: 680-681. 1971.
- Lim, S. M. and A. L. Hooker. Southern corn leaf blight: Genetic control of pathogenicity and toxin production in race T and race O of Cochliobolus heterostrophus. Genetics 69: 115-117. 1971.
- Loesch, P. J., Jr., and M. S. Zuber. Influence of population density on comparative performance of the F_1 and F_2 generations from single crosses of maize (Zea mays L.). Z. Pflanzen. 66: 76-86. 1971.

- Maguire, M. P. Relationship of synaptic failure in and adjacent to a short heterozygous inversion to crossing over within it. Abstracts of Papers, 11th Ann. Meeting Amer. Soc. Cell Biol.: 175. 1971.
- Maguire, M. P. Chromosome behavior at the premeiotic mitosis in maize. Genetics 68: S40-S41. 1971. (Abstr.)
- Manninger, I. Subline differences in resistance to diseases. In: Proceedings of the Fifth Meeting of the Maize and Sorghum Section of EUCARPIA. Akademiai Kiado, Budapest. Pp. 187-189. 1971.
- Manninger, I. Versuche mit systemischen Fungiziden gegen Kopfbrand des Mais. Acta Phytopath. Acad. Sci. Hungaricae 6 (1-4): 423-425. 1971.
- Marquez-Sanchez, F. and A. R. Hallauer. Influence of sample size on the estimation of genetic variance in a synthetic variety of maize. II. Plant and ear characters. Iowa St. J. Sci. 44: 423-436. 1970.
- Marsalek, L. A comparison of catalase activities in self-pollinated lines and simple hybrids of maize. Acta Univ. Agric. Fac. Agron. Brno 17: 645-650. 1969.
- Marsalek, L. A comparative physiological and genetical study of the activity of some enzymes in early growth stages of self-pollinated lines and simple hybrids of maize. Acta Univ. Agric. Fac. Agron. Brno 17: 537-545. 1969.
- Marsalek, L. A comparative physiologico-genetical study of activities of some enzymes in a heterotic single cross hybrid of maize (Zea mays L.). Euphytica 20: 131-137. 1971.
- Miller, R. J. and D. E. Koeppel. Southern corn leaf blight: susceptible and resistant mitochondria. Science 173: 67-69. 1971.
- Miller, R. J., D. T. Bell, and D. E. Koeppel. The effects of water stress on some membrane characteristics of corn mitochondria. Plant Physiol. 48: 229-231. 1971.
- Mock, J. J. Manipulation of crossing over in Zea mays L. by actinomycin D. Iowa State Journal of Sci. 45: 513-527. 1971.
- Mock, J. J. and L. L. Buren. Classification of maize (Zea mays L.) inbreds for population tolerance by general combining ability. Iowa State Journal of Sci. 46: 395-404. 1972.
- Mohamed, A. H. Chromosomal changes in maize induced by hydrogen fluoride gas. Canad. J. Genet. Cytol. 12: 614-620. 1970.

- Moll, R. H. and C. W. Stuber. Comparisons of response to alternative selection procedures initiated with two populations of maize (Zea mays L.). *Crop Sci.* 11: 706-711. 1971.
- Moore, C. L. Developing host resistance in maize to downy mildews caused by *Sclerospora*. *Indian Phytopath.* 23: 380-383. 1970.
- Moss, G. I. and L. A. Downey. Influence of drought stress on female gametophyte development in corn (Zea mays L.) and subsequent grain yield. *Crop Sci.* 11: 368-373. 1971.
- Mukherjee, B. K., R. S. Pandeya and N. L. Dhawan. Genetic studies in varieties of maize. II. Genetic analysis of certain ear and tassel characters. *Jap. J. Breeding* 20:111-115. 1970.
- Mukherjee, B. K., N. P. Gupta, S. B. Singh and N. N. Singh. Metroglyph analysis of Indian and exotic varieties of maize. *Euphytica* 20: 113-118. 1971.
- Mulcahy, D. L. A correlation between gametophytic and sporophytic characteristics in Zea mays L. *Science* 171 (3976): 1155-1156. 1971.
- Muller, L. D., R. F. Barnes, L. F. Bauman, and V. F. Colenbrander. Variations in lignin and other structural components of brown midrib mutants of maize. *Crop Sci.* 11: 413-416. 1971.
- Murphy, J. L. Maize from an Adena mound in Athens county, Ohio. *Science* 171: 897-898. 1971.
- Nagy, H. A., M. Pacsery, and A. Faludi-Daniel. Activity and compartmentation of photosynthetic carboxylases in normal and chloroplast-mutant maize leaves. *Physiol. Plant.* 24: 301-305. 1971.
- Nass, H. G. and M. S. Zuber. Correlation of corn (Zea mays L.) roots early in development to mature root development. *Crop Sci.* 11: 655-658. 1971.
- Nault, L. R., H. J. Harlan and W. R. Findley. Comparative susceptibility of corn to aphid and mechanical inoculation of maize dwarf mosaic virus. *J. Econ. Ent.* 64: 21-23. 1971.
- Nelson, O. E. How crops are modified. *Bull. Conn. Agric. Exp. Sta.* No. 708. Pp. 180. 1969.
- Nelson, R. R. Southern corn leaf blight roundtable. *Crops and Soils* 23: 12-21. 1971.
- Nelson, R. R. Studies and observations on the overwintering and survival of isolates of Helminthosporium maydis on corn. *Plant Dis. Repr.* 55: 99-103. 1971.

- Nelson, R. R., J. E. Ayers, and J. B. Beckett. Reactions of various corn inbreds in normal and different male-sterile cytoplasm to the yellow leaf blight organism (*Phyllosticta* sp.). *Plant Disease Reporter* 55: 401-403. 1971.
- Nelson, R. R., D. R. MacKenzie and G. L. Schiefele. Interaction of genes for pathogenicity and virulence in *Trichometasphaeria turcica* with different numbers of genes for varietal resistance in *Zea mays*. *Phytopath.* 60: 1250-1254. 1970.
- Omolo, E. and W. A. Russell. Genetic effects of population size in the reproduction of two heterogeneous maize populations. *Iowa State J. of Sci.* 45: 499-512. 1971.
- Orel, L. I. The development of maize pollen with Texan and Moldavian types of cytoplasmic male sterility: a study on living material. *Bull. Vavilov All-Un. Inst. Pl. Industr.* 15: 47-52. 1970.
- Orsenigo, M. and G. Marziani. Chloroplast structural changes during temperature-induced bleaching and re-greening in a "golden leaf" mutant of maize. *Caryologia* 24: 347-364. 1971.
- Padma, A. and G. M. Reddy. Peroxidase isozymes in the developing endosperms of maize. *J. Heredity* 62 (4): 252-254. 1971.
- Paez, A. V., J. L. Helm, and M. S. Zuber. Dosage effects of opaque-2 and floury-2 on lysine, protein and light transmission of maize (*Zea mays* L.) endosperm. *Z. Pflanzenzuchtung* 63: 119-124. 1970.
- Palandri, M. On the presence of para-crystalline formations in the cytoplasm of a maize albino mutant. *Caryologia* 23: 405-413. 1970.
- Palmer, R. G. Cytological studies of ameiotic and normal maize with reference to premeiotic pairing. *Chromosoma* 35: 233-247. 1971.
- Penny, L. H. and S. A. Eberhart. Twenty years of reciprocal recurrent selection with two synthetic varieties of maize. *Crop Sci.* 11: 900-903. 1971.
- Pesev, N. V. Genetic factors affecting maize tolerance to low temperatures at emergence and germination. *Theor. Appl. Genet.* 40: 351-356. 1970.
- Peterson, P. A. The *En* mutable system in maize. III. Transposition associated with mutational events. *Theor. Appl. Genet.* 40: 367-377. 1970.
- Pfahler, P. L. Reproductive characteristics of *Zea mays* L. Plants produced from gamma-irradiated kernels. *Radiation Bot.* 10: 329-335. 1970.

- Pfahler, P. L. In vitro germination and pollen tube growth of maize (Zea mays) pollen. IV. Effects of the fertility restoring Rf₁ locus. *Canad. J. Bot.* 49: 55-57. 1971.
- Pfahler, P. L. Gene transmission by maize pollen grains: Genotype-pollen longevity interactions. *Genetics* 68: s50-s51. 1971. (Abstr.)
- Pfahler, P. L. and H. F. Linskens. Biochemical composition of maize (Zea mays L.) pollen. I. Effects of the endosperm mutants, waxy (wx), shrunken (sh₂) and sugary (su₁) on the amino acid content and fatty acid distribution. *Theor. Appl. Genet.* 40: 6-10. 1970.
- Pfahler, P. L. and H. F. Linskens. Biochemical composition of maize (Zea mays L.) pollen. II. Effects of the endosperm mutants, waxy (wx), shrunken (sh₂) and sugary (su₁) on the carbohydrate and lipid percentage. *Theor. Appl. Genet.* 41: 2-4. 1971.
- Phillips, R. L., C. R. Burnham, and E. B. Patterson. Advantages of chromosomal interchanges that generate haplo-viable deficiency-duplications. *Crop Sci.* 11: 525-528. 1971.
- Phillips, R. L., R. A. Kleese, and S. S. Wang. The nucleolus organizer region of maize (Zea mays L.): Chromosomal site of DNA complementary to ribosomal RNA. *Chromosoma* 36: 79-89. 1971.
- Prine, G. M. A critical period for ear development in maize. *Crop Sci.* 11: 782-787. 1971.
- Quail, P. N. and J. G. Scandalios. Turnover of genetically defined catalase isozymes in maize. *Proc. Nat. Acad. Sci.* 68: 1402-1406. 1971.
- Raicu, P. and R. Chirila. Cytogenetic study of triploid maize and the frequency of aneuploids. *Caryologia* 24: 13-18. 1971.
- Reddy, A. R. and G. M. Reddy. Chemicogenetic studies of leucocyanidin in maize. *Curr. Sci.* 40 (13): 335-337. 1971.
- Reddy, G. M. Genetic basis of protein quality in maize. *Indian J. Genet.* 28A: 273-277. 1968.
- Reddy, G. M. Genetic and chemical studies of anthocyanin synthesis in maize. All India Congr. Cytol. Genet., Chandigarh, Punjab. Abstract 90-91. 1971.
- Robbertse, P. J. Graphs help with seed choice. *Landbouweekblad* (1710): 49-59. 1971.
- Robbertse, P. J. Adaptability of maize cultivars under South African growth conditions. *Proc. IV Congr. S. A. G. S.* Pp. 80, 84-86. 1971.

- Robertson, D. S. Investigations of the bipartite structure of the white-albino maize mutants. *Mol. Gen. Genetics* 112: 93-103. 1971.
- Rocha, A., P. Capiral, and P. S. Degamo. The effects of ultraviolet irradiation upon twenty-hour-preconditioned corn seeds. *Araneta J. Agric.* 16: 268-278. 1969.
- Rosenbrook, R. W. Some relationships of kernel carbohydrates in a diallel series of sweet corn (Zea mays L.) genotypes. *Diss. Abstr.* 29: 4481B-4482B. 1969. (Abstr.)
- Rosenbrook, R. W. and R. H. Andrew. Diallel analyses of kernel carbohydrates in sweet corn (Zea mays L.). *Crop Sci.* 11: 536-539. 1971.
- Rumawas, F., B. O. Blair, and R. J. Bula. Microenvironment and plant characteristics of corn (Zea mays L.) planted at two row spacings. *Crop Sci.* 11: 320-324. 1971.
- Russell, W. A. Types of gene action at three gene loci in sublimes of a maize inbred line. *Canad. J. Genet. Cytol.* 13: 322-324. 1971.
- Rutger, J. N. Effect of plant density on yield of inbred lines and single crosses of maize (Zea mays L.). *Crop Sci.* 11: 475-477. 1971.
- Rutger, J. N., C. A. Francis, and C. O. Grogan. Diallel analysis of ear leaf characteristics in maize (Zea mays L.). *Crop Sci.* 11: 194-195. 1971.
- Sarkar, K. R. and E. H. Coe, Jr. Analysis of events leading to heterofertilization in maize. *J. Heredity* 62: 118-120. 1971.
- Sarkar, K. R. and E. H. Coe, Jr. Anomalous fertilization in diploid-tetraploid crosses in maize. *Crop Sci.* 11: 539-542. 1971.
- Sarkar, K. R. and E. H. Coe, Jr. Origin of parthenogenetic diploids in maize and its implications for the production of homozygous lines. *Crop Sci.* 11: 543-544. 1971.
- Sarkar, K. R., J. K. S. Sachan and D. S. Mathur. Detection of androgenetic monoploids in maize. *Curr. Sci.* 41: 190-192. 1972.
- Sarvella, P., C. O. Grogan, and B. J. Stojanovic. Amino acids in different plant parts of normal and male-sterile maize (Zea mays L.). *Crop Sci.* 11: 805-807. 1971.
- Scandalios, J. and M. R. Felder. Effects of homozygosity and heterozygosity on biochemical properties of genetically defined electrophoretic variants of alcohol dehydrogenase isozymes in maize. *Genetics* 68: s58. 1971. (Abstr.)

- Scandalios, J. G. and M. R. Felder. Developmental expression of alcohol dehydrogenases in maize. *Developmental Biol.* 25: 641-654. 1971.
- Scheifele, G. L. Geographical distribution of Helminthosporium maydis race T for 1969 and 1970. *Plant Dis. Repr.* 55: 302-306. 1971.
- Scheifele, G. L. and R. R. Nelson. Factors affecting the survival of Trichometasphaeria turcica (Helminthosporium turcicum) on Zea mays. *Canad. J. Bot.* 48: 1603-1608. 1970.
- Scheifele, G. L., W. Whitehead, and C. Rowe. Increased susceptibility to southern leaf spot (Helminthosporium maydis) in inbred lines and hybrids of maize with Texas male-sterile cytoplasm. *Plant Dis. Repr.* 54: 501-503. 1970.
- Schwartz, D. Dimerization mutants of alcohol dehydrogenase of maize. *Proc. Nat. Acad. Sci. USA* 68: 145-146. 1971.
- Schwartz, D. Subunit interaction of a temperature-sensitive alcohol dehydrogenase mutant in maize. *Genetics* 67: 515-519. 1971.
- Schwartz, D. Genetic control of alcohol dehydrogenase--a competition model for regulation of gene action. *Genetics* 67: 411-425.
- Scott, G. E. and M. C. Futrell. Response of maize seedlings to Fusarium moniliforme and a toxic material extracted from this fungus. *Plant Dis. Repr.* 54: 483-486. 1970.
- Scott, G. E. and L. R. Nelson. Locating genes for resistance to maize dwarf mosaic in maize seedlings by using chromosomal translocations. *Crop Sci.* 11: 801-803. 1971.
- Semenova, E. V., V. I. Semenov and L. F. Kapicyna. Analysis of the causes and mechanisms of the decrease of fertility in auto-tetraploid maize. I. Meiosis in aneuploid plants. *Genetika Moskva* 7: 5-19. 1971.
- Sentz, J. C. Genetic variances in a synthetic variety of maize estimated by two mating designs. *Crop Sci.* 11: 234-238. 1971.
- Severin, V. I. Male sterility of maize induced by extracts from another sub-species. *Cytology and Genetics, Kiev* 1: 86-87. 1967. (Abstr.)
- Shimabukuro, R. H., D. S. Frear, H. R. Swanson and W. C. Walsh. Glutathione conjugation. An enzymatic basis for atrazine resistance in corn. *Plant Physiol.* 47: 10-14. 1971.
- Singh, T. P. Association between certain stalk traits related to lodging and grain yield in maize (Zea mays L.). *Euphytica* 19: 394-397. 1970.

- Singh, T. P. Genetic variability, correlations and path analysis for yield and related variables in a collection of maize germplasms. *Madras Agric. J.* 57: 263-267. 1970.
- Smith, D. R., A. L. Hooker, S. M. Lim, and J. B. Beckett. Disease reaction of thirty sources of cytoplasmic male-sterile corn to Helminthosporium maydis race T. *Crop Sci.* 11: 772-773. 1971.
- Sodek, L. and C. M. Wilson. Amino acid composition of proteins isolated from normal, opaque-2, and floury-2 corn endosperms by a modified Osborne procedure. *J. Agr. Food Chem.* 19: 1144-1150. 1971.
- Sodek, L. and C. M. Wilson. Incorporation of leucine-¹⁴C and lysine-¹⁴C into protein in the developing endosperm of normal and opaque-2 corn. *Arch. Biochem.* 140: 29-38. 1970.
- Sopova, K. and J. Jordanov. Content of leaf pigments in maize and transmission of the character to hybrids in the F₁. *Plant Physiol. Sofia* 1: 45-56. 1970.
- Sprague, G. F. and H. H. McKinney. Further evidence on the genetic behavior of AR in maize. *Genetics* 67: 533-542. 1971.
- Strand, O. E. and R. Behrens. Effect of atrazine-oil combinations on several corn genotypes. *Proc. 24th N. Cent. Weed Control Conf.*: 32-33. 1969. (Abstr.)
- Straub, R. W. and M. L. Fairchild. Laboratory studies of resistance in corn to the corn earworm. *J. Econ. Ent.* 63: 1901-1903. 1970.
- Stuber, C. W. and R. H. Moll. Epistasis in maize (Zea mays L.) II. Comparisons of selected and unselected populations. *Genetics* 67: 137-149. 1971.
- Tantravahi, R. V. Multiple character analysis and chromosome studies in the Tripsacum lanceolatum complex. *Evolution* 25: 38-50. 1971.
- Tatum, L. A. The southern corn leaf blight epidemic. *Science* 171: 1113-1116. 1971.
- Thompson, D. L., W. D. Hanson, and A. W. Shaw. Ear height inheritance estimates and linkage bias among generation means of corn. *Crop Sci.* 11: 328-331. 1971.
- Ting, Y. C. Further studies on the synaptonemal complex of haploid maize. *Genetics (Suppl.)* 68: s67. 1971. (Abstr.)
- Ting, Y. C. Chromosome polymorphism in Guatemalan teosinte. *Chromosomes Today* 2: 230-235. Ed. by C. D. Darlington and K. R. Lewis, Oliver and Boyd, Ltd., Edinburgh. 1969.

- Tregubenko, M. and V. I. Nepomnjascij. The water consumption of brachytic maize hybrids in relation to their yield. Bull. All-Un. Sci.-Res. Maize Inst. 1969: 21-26. 1969.
- Troyer, A. F. and W. B. Ambrose. Plant characteristics affecting field drying rate of ear corn. Crop Sci. 11: 529-531. 1971.
- Tu, J. D. and R. E. Ford. Maize dwarf mosaic virus infection in susceptible and resistant corn: virus multiplication, free amino acid concentrations, and symptom severity. Phytopath. 60: 1605-1608. 1970.
- Turbin, N. V. and A. N. Palilova. A theoretical model for the interaction of chromosome genes and cytoplasm in the case of cytoplasmic male sterility in maize. Rep. All-Un. Lenin Acad. Agric. Sci. 1970: 2-4. 1970.
- Turbin, N. V., N. V. Atrasenok, A. N. Palilova and E. I. Ljul'kina. A study of the structure of mitochondria in the ovules of maize hybrids obtained by crossing sterile lines with fertility restorers. Rep. Acad. Sci. USSR 182: 699-700. 1968. (Abstr.)
- Turbin, N. V., A. N. Palilova, A. V. Smol'skaya, and L. S. Serpokrylova. Effect of sterile cytoplasm on microsporogenesis in maize lines. Rep. Acad. Sci. USSR 188: 1179-1181. 1969. (Abstr.)
- Ullstrup, A. J. A comparison of monogenic and polygenic resistance to Helminthosporium turcicum in corn. Phytopath. 60: 1597-1599. 1970.
- Ulmer, R. L., F. A. Haskins, and W. R. Akeson. Influence of iron supply on peroxidase activity and peroxidase isozymes in corn (Zea mays). Crop Sci. 11: 816-818. 1971.
- Vaidyanath, K. and G. M. Reddy. Action of some anthocyanin pigment controlling genes in Zea mays. Curr. Sci. 40 (7B): 164-165. 1971.
- Vasal, S. K., C. L. Moore and U. Pupipat. Inheritance of resistance to Coryularia leaf spot in maize. SABRAO Newsl. Mishima 2: 81-89. 1970.
- Vladescu, B., I. Borsan, S. Staicu, and P. Raicu. Complementation at the level of glutamate-oxalacetate transaminase activity in maize. Rev. Roum. Biol. 15: 125-129. 1970.
- Weber, E. J. Lipids of maturing grain of corn (Zea mays L.) I. Changes in lipid classes and fatty acid composition. J. Amer. Oil Chem. Soc. 46: 485-488. 1969.
- Weber, E. J. Lipids of maturing grain of corn (Zea mays L.). II. Changes in polar lipids. J. Amer. Oil Chem. Soc. 47: 340-343. 1970.

- Weber, E. J., I. A. De La Roche, and D. E. Alexander. Stereo-specific analysis of maize triglycerides. *Lipids* 6: 525-530. 1971.
- Williams, L. E., E. J. Dollinger, and W. R. Findley. A new disease threat: southern corn leaf blight. *Ohio Rep. Res. Dev. Biol. Agric. Home Econ.* 55: 110-111. 1970.
- Wilson, C. M. Plant nucleases. III. Polyacrylamide gel electrophoresis of corn ribonuclease isoenzymes. *Plant Physiol.* 48: 64-68. 1971.
- Wilson, G. F. and A. M. Rhodes. Similarity of five sources of chlorotic-lesion resistance to Helminthosporium turcicum in a sweet corn background. *Plant Dis. Reprtr.* 54: 896-897. 1970.
- Wiseman, B. R., W. W. McMillian, and N. W. Widstrom. Husk and kernel resistance among maize hybrids to an insect complex. *J. Econ. Ent.* 63: 1260-1262. 1970.
- Wright, J. A., A. R. Hallauer, L. H. Penny, and S. A. Eberhart. Estimating genetic variance in maize by use of single and three-way crosses among unselected inbred lines. *Crop Sci.* 11: 690-695. 1971.
- Zuber, M. S., A. J. Kaster, N. G. Weir, C. F. Stark, and P. J. Loesch, Jr. Virus ratings of corn strains in Missouri 1969. *Missouri Agri. Exp. Sta. Spec. Rpt. #115.* 1970.
- Zuber, M. S., G. J. Musick, and M. L. Fairchild. A method of evaluating corn strains (Zea mays L.) for tolerance to the western corn rootworm. *J. Econ. Entom.* 64: 1514-1518. 1971.
- Zuber, M. S. et al. 1970 virus ratings for corn strains in Missouri. *U. Missouri Agr. Exp. Sta. Spec. Report 128.* 1970.