

VII. RECENT MAIZE PUBLICATIONS

Acosta, A. E. and P. L. Crane. Further selection for lower ear height in maize. *Crop Sci.* 12: 165-167. 1972.

Alexandrescu, V., I. Sutka, I. Hagimacalin, D. Popov, and F. Mihailescu. The molecular forms of some enzymes from the seeds of one maize inbred and the mutants obtained by neutron irradiation. *Studii si Cercetari de Biochimie* 14(3): 263-267. 1971.

Aragaki, M. and R. R. Berquist. Occurrence of Helminthosporium maydis in Hawaii. *Plant Disease Repr.* 55: 392-393. 1971.

Ayers, J. E. Southern leaf blight threat to 1971 corn depends on variables. *Science in Agric.* 18: 8-9. 1971.

Baker, D. E., F. J. Wooding, and M. W. Johnson. Chemical element accumulation by populations of corn (Zea mays L.) selected for high and low accumulation of P. *Agron. Jour.* 63: 404-406. 1971.

Banerjee, U. C. and E. S. Barghoorn. Fine structure of pollen grain exine of maize, teosinte and Tripsacum. In 30th Ann. Proc. Electron Micro. Soc. Amer., Los Angeles, Cal. Edited by C. J. Arceneaux. pp. 226-227. 1972.

Banerjee, U. C. and E. S. Barghoorn. Morphology and fine structure of the pollen grains of maize and its relatives. 5th Ann. Meeting Amer. Assoc. Stratigraphic Palynologists, Kingston, R.I. 1972.

Banfi, G. and M. Garavaglia. Automatic analysis of protein content of maize kernels. *Maydica* 15: 96-102. 1970.

Beckett, J. B. An expanded set of B-type translocations in maize. *Genetics* 71: s3-s4. 1972. (Abstr.)

Bergquist, R. R. and G. Peverly. Reaction of corn inbreds and hybrids with different cytoplasms and genotypes to Helminthosporium maydis, race T. *Plant Disease Repr.* 56: 112-114. 1972.

Bharathi, V. S. and G. M. Reddy. Anomalous behavior of an induced yellow-green mutant in maize. *Genetics* 71: s5. 1972. (Abstr.)

Bianchi, A., C. Lorenzoni, and F. Salamini. Acquisizioni e prospettive nel miglioramento genetico del mais. Convegno Nazionale aspetti e problemi maiscoltura Italiana Pisa:186-220. 1971.

Blanco, M., A. Lorenzo-Andreu, and J. L. Blanco. Phyllotaxic modifications in maize. II. *Anales Est. Exp. Aula Dei* 10: 716-723. 1969.

Blumenschein, A., M. M. Igreja, and M. A. Valerio. Investigation of a possible mutagenic effect of juice from irradiated banana. *Proc. Lat. Amer. Study Group on Ind. Mutations and Plant Improv.*, Buenos Aires, Nov. 1970. IAEA, Vienna, Austria: 505-510. 1972.

- Boothroyd, C. W. Southern leaf blight in corn. N. Y. Food and Life Sci. Quart. 4: 18-19. 1971.
- Brewbaker, J. L. and E. H. Johnson. Isoenzymic polymorphisms of maize peroxidases. Amer. Jour. Bot. 58: 478. 1971. (Abstr.)
- Brown, A. H. D. Isozyme variation under selection in Zea mays. Nature 232: 570-571. 1971.
- Burnham, C. R., J. T. Stout, W. H. Weinheimer, R. V. Kowles, and R. L. Phillips. Chromosome pairing in maize. Genetics 71: 111-126. 1972.
- Byrka, S. G. Induction of mutants in maize by ultrasonic waves and chemical mutagens. Tr. Kishinev S.-kh. In-ta 71: 90-98. 1970.
- Cabulea, I. and F. Zetea. Genetical determination of some biochemical traits of the maize kernel. Genetica Agraria 26: 43-61. 1972.
- Cabulea, I., I. Munteanu, and P. Ardelean. Some aspects of the genetic control of the reaction of maize to Ustilago maydis (DC) Corda. Z. Pflanzenzuchtung 66: 1-8. 1971.
- Cerny, J. and Z. Stehno. The variability of quantitative characters in maize after chronic irradiation of the F_1 hybrid generation. Genetika a Slechteni 8: 37-46. 1972.
- Chemblliss, O. L. and E. V. Wann. Antibiosis in earworm resistant sweet corn. Jour. Amer. Soc. Hort. Sci. 96: 273-277. 1971.
- Chang, H. S., and P. J. Loesch, Jr. Genetic variation of four anatomical traits and their association with stalk quality traits in maize (Zea mays L.). Crop Sci. 12: 271-274. 1972.
- Chao, S. E. and J. G. Scandalios. Developmentally dependent expression of tissue specific amylases in maize. Molec. Gen. Genetics 115: 1-9. 1972.
- Chebotar', A. A. Some cases of apomixis in maize. Apomiks i Seleksiya. Moscow USSR, Nauka 1970: 100-106. 1970.
- Chourey, P. S. and D. Schwartz. Ethyl methanesulfonate-induced mutations of the Sh₁ protein in maize. Mutation Research 12: 151-157. 1971.
- Colbert, T. R. and O. Myers, Jr. Inheritance of pith cell death patterns in maize. Agron. Abstr. 1971: 4. 1971. (Abstr.)
- Colless, J. M. Breeding maize resistant to northern leaf blight. Agric. Gaz. of New South Wales 82: 382. 1971.
- Comstock, J. C. and R. P. Scheffer. Production and relative host-specificity of a toxin from Helminthosporium maydis race T. Plant Disease Repr. 56: 247-251. 1972.

Correnti, J. and R. M. Solari. Association between the floury condition and the protein components of the endosperm in the opaque-2 mutant. Proc. Lat. Amer. Study Group on Ind. Mutations and Plant Improv., Buenos Aires, Nov. 1970. IAEA, Vienna, Austria: 365-368. 1972.

Couture, R. M., D. G. Routley, and G. M. Dunn. Role of cyclic hydroxamic acids in monogenic resistance of maize to Helminthosporium turcicum. Physiol. Plant Path. 1: 515-521. 1971.

Cox, E. L. and D. B. Dickinson. Identification of maize seedling mutants lacking starch accumulation capacity. Biochem. Genetics 5: 15-25. 1971.

Cox, E. L. and D. B. Dickinson. Hexokinase from maize endosperm. Phytochemistry 10: 1771-1775. 1971.

Cox, E. L. and D. B. Dickinson. Increased hexokinase levels in endosperm of mutant maize. Phytochemistry 12: 291-297. 1973.

Creech, R. G. Enzymatic aspects of maize genetics. Cereal Science Today 16: 290. 1971. (Abstr.)

Cross, H. Z. and M. S. Zuber. Prediction of flowering dates in corn based on different methods of estimating thermal units. Agron. J. 64: 351-355. 1972.

Cross, H. Z., H. R. Lund, and E. L. Deckard. Progress report on hybrid corn grain yields at Oakes. North Dakota Farm Research 30(1): 33-38. 1972.

Dahmen, W. J. and J. J. Mock. Effects of nutrient media composition on growth of seedlings from intact seeds and excised embryos of maize (Zea mays L.). Crop Sci. 12: 549-550. 1972.

Darrah, L. L. and A. R. Hallauer. Genetic effects estimated from generation means in four diallel sets of maize inbreds. Crop Sci. 12: 615-621. 1972.

Darrah, L. L., S. A. Eberhart, and L. H. Penny. A breeding method study in Kenya. Crop Sci. 12: 605-608. 1972.

Deromedis, R. Chromosome morphology of some varieties of maize (Zea mays) cultivated in Chile. Revista Fac. Ciencias Agrarias, Univ. Nac. Cuyo 15: 3-35. 1969.

De Wet, J. M. J., J. R. Harlan and C. A. Grant. Origin and evolution of teosinte (Zea mexicana (Schrad.) Kuntze). Euphytica 20: 255-265. 1971.

De Wet, J. M. J., L. M. Engle, C. A. Grant, and S. T. Tanaka. Cytology of maize-tripsacum introgression. Amer. Jour. Bot. 59: 1026-1030. 1972.

- De Wet, J. M. J., J. R. Harlan, R. J. Lambert, and L. M. Engle. Introgression from Tripsacum into Zea and the origin of maize. *Caryologia* 25: 25-31. 1972.
- Dimitrov, P., S. Petkova, D. Nashkov, O. Nashkova, and E. Marimkov. Immuno-electrophoretic studies of heterosis effect in Zea mays. *Theor. Appl. Genet.* 42: 306-310. 1972.
- Douglas, G. R. Effects of heterochromatin and translocation on the synchrony of replication between homologous chromosomes in maize. *Canad. J. Genet. Cytol.* 14: 724. 1972. (Abstr.)
- Doyle, G. G. and E. H. Coe, Jr. A model for the synapsis of chromosomes utilizing interrupted complementary reverse repeats in DNA. *Genetics* 71: s15. 1972. (Abstr.)
- Dufrenoy, M. Study on the susceptibility of male-sterile maize lines to Helminthosporium maydis. *Comp. Rend. Seances Acad. Agric. France* 57: 990-991. 1971.
- Eastin, E. F. Growth and response to atrazine of six selections of inbred corn GT112. *Agron. Jour.* 63: 656-657. 1971.
- Eberhart, S. A., A. R. Hallauer, and W. A. Russell. Registration of four maize Germplasm synthetics. *Crop Sci.* 12: 132. 1972.
- Efron, Y. Specific differences in maize alcohol dehydrogenase: possible explanation of heterosis at the molecular level. *Nature New Biol.* 241: 41-42. 1973.
- Ellsworth, R. L. and S. J. Peloquin. Influence of the cytoplasm on ear number expression in corn. *Crop Sci.* 12: 388-389. 1972.
- Empig, L. T., C. O. Gardner and W. A. Compton. Theoretical gains for different population improvement procedures. *Nebr. Agr. Exp. Sta. Misc. Pub.* 26 Revised. 1972.
- Epstein, A. H., J. E. Reynolds, and W. P. Dietz. Stalk rot in corn influenced by Texas male sterile cytoplasm. *Phytopath.* 61: 891. 1971. (Abstr.)
- Filion, W. G. An examination of chromosomal indices. *Canad. J. Genet. Cytol.* 14: 661-665. 1972.
- Filion, W. G. The somatic karyotype of maize: analysis of a series of reciprocal interchanges. *Canad. J. Genet. Cytol.* 14: 726-727. 1972. (Abstr.)
- Findley, W. R., E. J. Dollinger, and S. A. Eberhart. Gene action in Oh45 and Oh45B. *Crop Sci.* 12: 287-290. 1972.
- Fleming, A. A. Male cytoplasmic effect on reaction of maize to diseases. *Plant Dis. Repr.* 56: 575-577. 1972.

- Fleming, A. A. Cytoplasmic effects in maize, Zea mays L. ASA Agron. Abst.: 7. 1972. (Abstr.)
- Fowler, R. and P. A. Peterson. Diversity of germinal derivatives arising from the action of a controlling element system in maize. Genetics 71: s18. 1972. (Abstr.)
- Freeling, M. Further studies on the regulation of Adh₁ and Adh₂ genes in maize by competition for a limited factor. Genetics 71: s18-s19. 1972. (Abstr.)
- Freeling, M. and D. Schwartz. Genetic relationships between the multiple alcohol dehydrogenases of maize. Biochem. Genet. 8: 27-36. 1972.
- Freeman, J. E., B. J. Bocan, and H. F. Zobel. Starch variation associated with location in corn and sorghum plants. Crop Sci. 12: 122-124. 1972.
- Fujii, T. Effect of fractionation treatment with gamma-rays on the mutation frequency in maize. Jap. Jour. Genet. 46: 243-251. 1971.
- Garwood, D. L. and R. G. Creech. Kernel phenotypes of Zea mays L. genotypes possessing one to four mutated genes. Crop Sci. 12: 119-121. 1972.
- Gavazzi, G. and G. Avila. Mutability of the S component of the R locus in Zea mays. Atti Assoc. Genetica Italiana 15: 179-183. 1970.
- Ghidoni, A. Genetic and cytological analysis of maize aneuploids obtained from nondisjunction and breakage of chromosome 1. Genetica Agraria 26: 147-148. 1972. (Abstr.)
- Golodkovskii, V. L., T. R. Rashidov and N. Akhundzhanov. The mutations ba₁ and a₁ in intergeneric hybrids of Zea mays L. X Euchlaena mexicana Schrad. Genetika 7(10): 10-12. 1971.
- Goodman, M. M. Distance analysis in biology. Systematic Zoology 21: 174-186. 1972.
- Grancini, P. Helminthosporium maydis Nisik. et Miyake in Italy. Maydica 15: 55-57. 1971.
- Greyson, R. I. and D. B. Walden. Aberrant phyllotaxy in corn. Amer. Jour. Bot. 58: 458. 1971.
- Greyson, R. I. and D. B. Walden. The Abphyl syndrome in Zea mays. I. Arrangement, number and size of leaves. Amer. Jour. Bot. 59: 466-472. 1972.
- Grogan, C. O. and R. B. Musgrave. New efficiency for corn plants. New York's Food and Life Sci. Quart. 4: 27-28. 1971.

- Haddad, M. M., M. A. Sahrigy, and G. S. Mallah. Cytological behavior in the teosinte-maize hybrids. Alexandria Jour. Agric. Res. 19: 105-113. 1971.
- Haddad, M. M., M. A. Sahrigy, and G. S. Mallah. Genetical studies on the teosinte-maize hybrids. Alexandria Jour. Agric. Res. 18: 185-190. 1970.
- Hallauer, A. R. Third phase in the yield evaluation of synthetic varieties of maize. Crop Sci. 12: 16-18. 1972.
- Hallauer, A. R. and J. H. Sears. Integrating exotic germplasm into Corn Belt maize breeding programs. Crop Sci. 12: 203-206. 1972.
- Harpstead, D. D. High-lysine corn. Scient. Amer. 225: 34-42. 1971.
- Harris, R. E., C. O. Gardner and W. A. Compton. Effects of mass selection and irradiation in corn measured by Random S_1 lines and their test-crosses. Crop Sci. 12: 594-598. 1972.
- Heichel, G. H. Stomatal movements, frequencies, and resistances in two maize varieties differing in photosynthetic capacity. Jour. Exp. Bot. 22: 644-649. 1971.
- Heichel, G. H. Stomatal frequency: genetic control in maize. Agron. Abstr. 1971: 23. 1971. (Abstr.)
- Helm, J. L. and M. S. Zuber. Inheritance of pericarp thickness in corn belt maize. Crop Sci. 12: 428-431. 1972.
- Helm, J. L. and M. S. Zuber. Metaxenia effect on dent corn pericarp thickness. Crop Sci. 12: 702-703. 1972.
- Hooker, A. L. Helminthosporium maydis. A challenge for the maize breeder. Eucarpia. Proc. 6th Meeting Maize and Sorghum Sect. (European Assoc. for Research on Plant Breeding). p. 333-367. 1971.
- Hooker, A. L. Helminthosporium maydis una sfida per la genetica applicata. Maydica 16: 5-36. 1971.
- Hooker, A. L. Status of southern corn leaf blight, past and present. Proc. 26th Ann. Corn and Sorghum Ind.-Res. Conf. pp. 127-143. 1971.
- Hooker, A. L. Corn. 1972 McGraw-Hill Yearbook of Science and Technology. pp. 158-162. 1972.
- Hooker, A. L. Southern leaf blight of corn - present status and future prospects. J. Environ. Qual. 1: 244-249. 1972.
- Horn, J. D. and D. B. Walden. Fluorescent staining of euchromatin and heterochromatin in maize (Zea mays). Canad. J. Genet. Cytol. 13: 811-816. 1971.

- Horner, E. S., W. H. Chapman, H. W. Lundy, and M. C. Lutrick. Commercial utilization of the products of recurrent selection for specific combining ability in maize. *Crop Sci.* 12: 602-605. 1972.
- Horrocks, R. D., F. D. Cloninger, and M. S. Zuber. The relationship between stalk lodging and corn leaf blight. *Plant Disease Rept.* 56: 11-14. 1972.
- Horvath, G. I., J. Kissimon, and A. Faludi-Daniel. Varieties of dominance in the inheritance of carotenoid composition of caryopses of maize. *Acta Biologica* 22: 279-285. 1971.
- Hunter, R. B. and L. W. Kannenberg. Effects of seed size on emergence, grain yield and plant height in corn. *Canad. Jour. Plant Sci.* 52: 252-256. 1972.
- Hunter, R. B. and L. W. Kannenberg. Isozyme characterization of corn (*Zea mays*) inbreds and its relationship to single cross hybrid performance. *Canad. Jour. Genet. Cytol.* 13: 649-655. 1971.
- Ihrke, C. A. Comparison of crossover induction in inversion and non-inversion maize chromosomes. *Genetics* 71: s26-s27. 1972. (Abstr.)
- Iltis, H. H. The taxonomy of *Zea mays* (Gramineae). *Phytologia* 23: 248-249. 1972.
- Jancey, R. C. and D. B. Walden. Analysis of pattern in distribution of breakage points in the chromosomes of *Zea mays* L. and *D. melanogaster* Meigen. *Canad. J. Genet. Cytol.* 14: 429-442. 1972.
- Johnson, H., Jr., J. W. Cameron, and O. C. Taylor. Air pollution resistance in sweet corn varieties. *Calif. Agric.* 25: 8-10. 1971.
- Josephson, L. M. and H. C. Kincer. Resistance to southern corn leaf blight. *Tenn. Farm and Home Sci. No.* 80: 5-7. 1971.
- Kannenberg, L. W. and R. B. Hunter. Yielding ability and competitive influence in hybrid mixtures of maize. *Crop Sci.* 12: 274-277. 1972.
- Kaptar', S. G. Study of the morphology of sperm cells in intergeneric maize x *tripsacum* hybrids and maize x teosinte hybrids. *Bul. Akad. Stiince RSS Mold. Ser. Biol. i Khim.* 1969(5): 68-69. 1969.
- King, Jr., C. C., D. L. Thompson, and J. C. Burns. Plant component yield and cell contents of an adapted and a tropical corn, *Zea mays* L. *Crop Sci.* 12: 446-450. 1972.
- Kleese, R. A. and R. L. Phillips. Electrophoretic mutants as useful markers for chromosome aberrations. *Genetics* 72: 537-540. 1972.
- Kommedahl, T. and D. S. Lang. Seedling wilt of corn from kernels naturally infected with *Helminthosporium maydis* in Minnesota. *Plant Disease Rept.* 55: 371-373. 1971.

- Kommedahl, T., D. S. Lang and K. L. Blanchard. Detection of kernels infected with Helminthosporium maydis in commercial samples of corn produced in 1970. Plant Disease Repr. 55: 726-729. 1971.
- Kovacs, I. Helminthosporium maydis race "T" epidemics in the U.S.A. Novenytermeles 21: 81-87. 1972.
- Kovacs, I. Rezultatu i metodu szelekci gibriddnoj kukuruzu. Vszeszojuznogo Naucsno-iszledovatyelskogo Inszstituta Kukuruzu. Vup. 1(24): 19-22. 1972.
- Kovacs, I. and M. Herczegh. Evaluation of some properties of opaque inbred lines. XIXth meeting of the Maize and Sorghum Section of EUCARPIA. 251-259. 1972.
- Kumar, S. Some agronomic traits studied for cytoplasmic differences in a maize composite. Madras Agric. Jour. 58: 545-547. 1971.
- Lachman, W. H. The combining ability of two degenerative sweet corn mutants. Jour. Amer. Soc. Hort. Sci. 96: 347-350. 1971.
- Lachman, W. H. Heating seedlings of normal, cyto sterile and restored-sterile corn and its effect on pollen production. Jour. Amer. Soc. Hort. Sci. 96: 502-503. 1971.
- Laikova, L. I. Cytoembryological data on autonomous endosperm formation in maize. Apomiks i Seleksiya. Moscow USSR, Nauka 1970: 106-110. 1970.
- Lim, S. M. and A. L. Hooker. A preliminary characterization of Helminthosporium maydis toxins. Plant Disease Repr. 56: 805-807. 1972.
- Lim, S. M. and A. L. Hooker. Disease determinant of Helminthosporium maydis race T. Phytopath. 62: 968-971. 1972.
- Lim, S. M., A. L. Hooker, and D. R. Smith. Use of Helminthosporium maydis race T pathotoxin to determine disease reaction of germinating corn seed. Agron. Jour. 63: 712-713. 1971.
- Lindgren, D. The temperature influence on the spontaneous mutation rate. II. Investigation by the aid of waxy mutants. Hereditas 70: 179-184. 1972.
- Loesch, P. J., Jr. Diallel analysis of stalk quality traits in 12 inbred lines of maize. Crop Sci. 12: 261-264. 1972.
- Loesch, P. J., Jr. and M. S. Zuber. Inheritance of resistance to maize dwarf mosaic virus. Crop Sci. 12: 350-352. 1972.
- Loesch, Jr., P. J. and M. S. Zuber. Diallel analysis of ash content in twelve inbred lines of corn (Zea mays L.). Canad. J. Pl. Sci. 52: 545-550. 1972.

- Loesch, Jr., P. J., M. S. Zuber, O. H. Calvert and E. S. Hilderbrand. Effects of diplodia stalk rot on stalk quality in corn (Zea mays L.). *Crop Sci.* 12: 469-471. 1972.
- Lorenz, H. Free amino acids in the leaves of inbred land varieties and hybrid varieties of maize. *Phytochem.* 11: 139-151. 1972.
- Lorenzoni, C. and F. Salamini. Analysis of glossy mutants in maize. III. Possible reversion mechanisms. *Atti Assoc. Genetica Italiana* 15: 184-185. 1970.
- Lorenzoni, C., G. Baldi, T. Maggiore, and F. Salamini. Spighette biflore sulla infiorescenza femminile di mais. *Maydica* 16: 65-82. 1972.
- MacDonald, T. and J. L. Brewbaker. Isoenzyme polymorphism in flowering plants. VIII. Genetic control and dimeric nature of transaminase hybrid maize isoenzymes. *J. Hered.* 63: 11-14. 1972.
- MacKenzie, D. R., H. Cole, and R. R. Nelson. Epidemiology of monogenic fungicide tolerance with the plant pathogen Cochliobolus carbonum. *Plant Disease Repr.* 56: 164-167. 1972.
- Maguire, M. P. The temporal sequence of synaptic initiation, crossing over and synaptic completion. *Genetics* 70: 353-370. 1972.
- Maguire, M. P. Relative amounts of DNA in mouse and maize haploid G1 genomes. *Genetics* 71: s36-s37. 1972. (Abstr.)
- Maguire, M. P. Premeiotic mitosis in maize: evidence for pairing of homologues. *Caryologia* 25: 17-24. 1972.
- Maguire, M. P. Role of heterochromatin in homologous pairing: Evaluation of evidence. *Science* 176: 543-544. 1972.
- Maletzky, S. I., E. V. Poliakova, E. V. Levites, and A. V. Axenovich. Genetic polymorphism with respect to catalase enzyme in diploid and tetraploid maize strains. *Genetika* 8(6): 13. 1972.
- Maranville, J. W. and G. M. Paulsen. Alteration of protein composition of corn (Zea mays L.) seedlings during moisture stress. *Crop Sci.* 12: 660-664. 1972.
- Marsalek, L. Physiological-genetic peculiarities of male-sterile forms of maize on the basis of determination of catalase activity. *Genetica Polonica* 12: 31-35. 1971.
- Mason, L. and M. S. Zuber. 1971 results of inter-regional and regional corn leaf blight ratings. *Plant Disease Repr.* 56: 485-490. 1972.
- Mason, L. and M. S. Zuber. Uniform evaluation tests--corn inbred lines. Sponsored by North Central Corn Breeding Research Committee. 1972.

- McFeeley, J. C. Comparison of isolates causing yellow leaf-blight of corn in Ohio. *Plant Disease Repr.* 55: 1064-1068. 1971.
- Melville, J. C. and J. G. Scandalios. Maize endopeptidases: Genetic control, chemical characterization, and relationship to an endogenous trypsin inhibitor. *Biochem. Genet.* 7: 15-31. 1972.
- Miku, V. E. Genetic analysis of some spontaneous maize mutations of the tassel-seed type. *Bul. Akad. Stiince RSS Mold.* 1969(5): 27-30. 1969.
- Miryuta, O. K. A new allele of the gametophytic gene of the fourth maize chromosome, ga^r. *Genetika* 7: 31-38. 1971.
- Mock, J. J. and S. A. Eberhart. Cold tolerance in adapted maize populations. *Crop Sci.* 12: 466-469. 1972.
- Moll, R. H., W. D. Hanson, C. S. Levings, III, and Y. Ohta. Associations between chromosomal knobs of Zea mays L. and agronomic performance. *Crop Sci.* 12: 585-590. 1972.
- Moore, C. W. and R. G. Creech. Genetic fine structure analysis of the Amylose-extender locus in Zea mays L. *Genetics* 70: 611-619. 1972.
- Moreno-Martinez, E. and C. M. Christensen. Differences among lines and varieties of maize in susceptibility to damage by storage fungi. *Phytopath.* 61: 1498-1500. 1971.
- Moss, D. N., C. M. Willmer, and R. K. Crookston. CO₂ compensation concentration in maize (Zea mays L.) genotypes. *Plant Physiol.* 47: 847-848. 1971.
- Motoyoshi, F. Protoplasts isolated from callus cells of maize endosperm. Formation of multinucleate protoplasts and nuclear division. *Exp. Cell Res.* 68: 452-456. 1971.
- Mulcahy, D. L. The evolutionary significance of gamete competition. *Genetics* 71: s42. 1972. (Abstr.)
- Murakami, K., M. Yamada and K. Takayanagi. Selective fertilization in maize, Zea mays L. I. Advantage of pollen from F₁ plant in selective fertilization. *Japan J. Breeding* 22(4): 203-208. 1972.
- Murphy, J. J. and A. Dalby. Changes in the protein fractions of developing normal and opaque-2 maize endosperm. *Cereal Chem.* 48: 336-348. 1971.
- Musiko, A. S., T. I. Kukina, and V. S. Lesnik. Experimental induction of tetraploid maize. *Doklady Vsesoyuznoi Ordena Lenina Akad. Sel'skokhozyaistvennykh Nauk Imeni V. I. Lenina* 1971(10): 4-5. 1971.
- Nakano, H. Tomorokoshi (maize). *Ienohikari-Kyokai*, Tokyo. pp. 130. 1972.

- Nishihara, N. Bibliography of soiling crop diseases in Japan. I. Maize disease. Bull. Nat. Grassland Res. Inst. 1: 59-72. 1972.
- Orinshtein, Z. A. A study of the effect of mutagenic factors on the resistance of maize to Ustilago maydis. Bul. Akad. Stiince RSS Mold. 1968(4): 51-61. 1968.
- Orinshtein, Z. A. Study of a maize mutant resistant to Ustilago maydis, obtained by treatment with ethyleneimine. Mutatsionnaya selectsiya. Moscow USSR, Nauka 1968: 65-67. 1968.
- Otsuka, Y., S. A. Eberhart, and W. A. Russell. Comparisons of prediction formulas for maize hybrids. Crop Sci. 12: 325-331. 1972.
- Palilova, A. N., N. V. Atrashenok, V. P. Sholudeva, A. V. Smol'skaya, and E. I. Lyul'kina. Results of a genetic, cytoembryological and electronmicroscopic study of the mechanisms of cytoplasmic male sterility (CMS). Vopr. Genetiki i Selectsii. Minsk, White Russ. SSR, Nauka i Tekhn. 1970: 197-211. 1970.
- Palmer, J. H. and A. A. Fleming. Breeding for chlorophyll content in maize (Zea mays L.). Agron. Abstr. 1970:26. 1970. (Abstr.)
- Patil, S. J., T. S. Rao, A. Ramamurthy. Genetic variation, heritability and genetic advance of quantitative characters in maize. Genetica Polonica 13: 185-193. 1972.
- Peters, L. L., M. L. Fairchild, and M. S. Zuber. Effect of corn endosperm containing different levels of amylose on Angoumois grain moth biology. I. Life cycle, certain physiological responses, and infestation rates. Jour. Econ. Entom. 65: 576-581. 1972.
- Peters, L. L., M. S. Zuber, and M. L. Fairchild. Effect of corn endosperm containing different levels of amylose on Angoumois grain moth biology. II. Physical and chemical properties of experimental corn. Jour. Econ. Entom. 65: 581-584. 1972.
- Peters, L. L., M. L. Fairchild, and M. S. Zuber. Effect of corn endosperm containing different levels of amylose on Angoumois grain moth biology. III. Interrelationship of angoumois levels and moisture content of diets. J. Econ. Entom. 65: 1168-1169. 1972.
- Peterson, P. A., M. N. Reddy, and C. L. Tipton. β -amylase activity differences between N and T cytoplasms of maize. Genetics 71: s47. 1972. (Abstr.)
- Pfahler, P. L. and H. F. Linskens. In vitro germination and pollen tube growth of maize (Zea mays L.) pollen. VI. Combined effects of storage and the alleles at the waxy (wx), sugary (su₁) and shrunken (sh₂) loci. Theor. Appl. Genet. 42: 136-140. 1972.

- Pirone, T. P., O. E. Bradfute, P. H. Freytag, M. C. Y. Lung, and C. G. Poneleit. Virus-like particles associated with a leafhopper-transmitted disease of corn in Kentucky. *Plant Disease Repr.* 56: 652-656. 1972.
- Plewa, M. P. and D. F. Weber. The effect of monosomy on lipid content of Zea mays embryos. *Genetics* 71: s47-s48. 1972. (Abstr.)
- Poneleit, C. G. Opaque-2 effects on single gene inheritance of corn oil fatty acid composition. *Crop Sci.* 12: 839-842. 1972.
- Poneleit, C. G. and D. L. Davis. Fatty acid composition of oil during maize kernel development. *Phytochem.* 11: 3421-3426. 1972.
- Poneleit, C. G. and K. O. Evans. Results of the Kentucky hybrid corn performance test--1971. *Ky. Agr. Exp. Sta. Prog. Rep.* 201. pp. 24. 1972.
- Poneleit, C. G., D. J. Politis, and H. Wheeler. Resistance to corn anthracnose. *Crop Sci.* 12: 875-876. 1972.
- Poneleit, C. G., M. J. Bitzer, K. O. Evans, and J. H. Herbek. Preliminary reports of corn and small grain yield trials. *Ky. Agr. Exp. Sta. Agron. Notes* 5(6): pp. 4. 1972.
- Popova, I. and A. Popov. Maize mutants with resistance to Helminthosporium turcicum Pass. obtained by means of α irradiation. *Genetika i Seleksiya* 4: 361-364. 1971.
- Pringle, R. B. Amino acid composition of the host-specific toxin of Helminthosporium carbonum. *Plant Physiol.* 48: 756-759. 1971.
- Ragab, M. M. and M. M. Fahim. Pathological and histological studies on Fusarium moniliforme Sheldon, the incitant of pink rot disease of maize in UAR. *Agric. Res. Rev.* 48: 141-156. 1970.
- Rakha, F. A. New technique for the introduction of new "hybrid" TB translocation in maize. *Alexandria Jour. Agric. Sci.* 18: 142-143. 1970. (Abstr.)
- Rhoades, M. M. and E. Dempsey. On the mechanism of chromatin loss induced by the B chromosome of maize. *Genetics* 71: 73-96. 1972.
- Rumball, W. and C. O. Grogan. Inheritance of a temperature-sensitive virescent mutant in Zea mays L. *J. Hered.* 63: 153-155. 1972.
- Russell, W. A. Effect of leaf angle on hybrid performance in maize (Zea mays L.). *Crop Sci.* 12: 90-92. 1972.
- Russell, W. A. Effects of exotic cytoplasms on agronomic characters of two maize inbred lines. *Iowa State J. Res.* 47: 141-147. 1972.

- Russell, W. A. Registration of B70 and B73 parental lines of maize (Reg. Nos. PL16 and PL17). *Crop Sci.* 12: 721. 1972.
- Schieber, E. Distribution of Puccinia polysora and P. sorghi in Africa and their pathogenicity on Latin American maize germplasm. FAO Plant Protection Bull. 19: 25-31. 1971.
- Schwartz, D. A method of high resolution immunoelectrophoresis for the alcohol dehydrogenase isozymes. *J. Chromatogr.* 67: 385-388. 1972.
- Shcherbak, V. S. Mendelian segregation in autotetraploid maize. *Genetika* 7: 29-35. 1971.
- Shevchenko, V. E. and N. S. Agafonov. Study of the physiological and biochemical action of the opaque-2 gene in isogenic maize hybrids. *Vestnik Sel'skokhozyaistvennoi Nauki* 1972(1): 55-57. 1972.
- Simpson, W. R. and H. S. Fenwick. Suppression of corn head smut with carboxin seed treatments. *Plant Disease Repr.* 55: 501-503. 1971.
- Singh, A. and J. R. Laughnan. Instability of S male-sterile cytoplasm in maize. *Genetics* 71: 607-620. 1972.
- Singh, R. Vector analysis in biparental progenies of maize (Zea mays L.) germplasm complex. *Himachal Jour. Agric. Res.* 1: 31-33. 1971.
- Siritsa, B. N. and S. I. Maletzky. Analysis of populations of Zea mays Averta Sturt. as to the consistence of the alleles of gametophyte locus in the fourth chromosome. *Genetika* 8(2): 5. 1972.
- Smirnova, L. F., A. N. Palilova, and S. R. Lyakhovich. Content of chlorophylls and carotenoids in leaves of maize plants with different types of cytoplasm. *Vestsi AN BSSR Ser. Biyal.* 1970(4): 110-113. 1970.
- Stevenson, J. C. and M. M. Goodman. Ecology of exotic races of maize. I. Leaf number and tillering of 16 races under four temperatures and two photoperiods. *Crop Sci.* 12: 864-869. 1972.
- Stuber, C. W. and R. H. Moll. Frequency changes of isozyme alleles in a selection experiment for grain yield in maize (Zea mays L.). *Crop Sci.* 12: 337-341. 1972.
- Stuber, C. W. and R. H. Moll. Registration of maize parental lines. *Crop Sci.* 12: 131. 1972.
- Sun, M. H. and A. J. Ullstrup. In vitro growth of corn endosperm. *Bull. Torrey Bot. Club* 98: 251-258. 1971.
- Sutka, J. and A. Balint. Effect of mutagens on the variability of quantitative characters in maize. *Novenytermeles* 20(2): 99-107. 1971.

- Thompson, D. L. Recurrent selection for lodging susceptibility and resistance in corn. *Crop Sci.* 12: 631-634. 1972.
- Ting, Y. C. Fate of synaptonemal complex during microsporocyte divisions of haploid maize. *Amer. Jour. Bot.* 58: 461. 1971. (Abstr.)
- Tomov, N. and A. Popov. Influence of the gene Ht on the heterosis effect in maize. *Genetika i Seleksiya* 5: 41-48. 1972.
- Tong, F. Chromosome knobs in maize from Venezuela and the Territory of Roraima in Brazil. Thesis, Escola Sup. Agric. "Luiz de Queiroz", Piracicaba, Brazil. 69 pp. 1969.
- Troyer, A. F. and W. L. Brown. Selection for early flowering in corn. *Crop Sci.* 12: 301-304. 1972.
- Tsil'ke, R. A. and B. I. Gerasenkov. Heterochromatic knobs on maize chromosomes. *Genetika* 7: 14-24. 1971.
- Turner, M. T. and C. A. Martinson. Susceptibility of corn lines to Helminthosporium maydis toxin. *Plant Disease Repr.* 56: 29-32. 1972.
- Tyrnov, V. S. and S. S. Khokhlov. The role of cytoplasm in determining haploidy in maize. *Genetika* 7: 157-158. 1971.
- Ullstrup, A. J. Hyper-susceptibility of high-lysine corn to kernel and ear rots. *Plant Disease Repr.* 55: 1046. 1971.
- Valodzin, U. G., I. A. Gardzei, and G. M. Gardzei. A cytogenetic analysis of the initial cytogenetic damage in radio-sensitive plants. *Vesti AN BSSR Ser. Biyal.* 1970(3): 73-79. 1970.
- Veiga, A. F. Relative susceptibility of various Latin American races of maize and of Brazilian commercial hybrids and varieties to the stored-grain pests Sitophilus zeamais Motschulsky, 1855 and Sitotroga cerealella (Olivier, 1819) in laboratory conditions. Thesis, Escola Sup. Agric. "Luiz de Queiroz", Piracicaba, Brazil. 154 pp. 1969.
- Vinitskaya, O. P. Comparative study of antigen properties of vegetative and reproductive organs in maize. *Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi Akad.* 1970(1): 153-165. 1970.
- Walles, B. Chromoplast development in a carotenoid mutant of maize. *Protoplasma* 73: 159-175. 1971.
- Wann, E. V., G. B. Brown, and W. A. Hills. Genetic modifications of sweet corn quality. *Jour. Amer. Soc. Hort. Sci.* 96: 441-444. 1971.
- Warmke, H. E. and N. C. Schenck. Occurrence of Fusarium moniliforme and Helminthosporium maydis on and in corn seed as related to cytoplasm. *Plant Disease Repr.* 55: 486-489. 1971.

- Weaver, S. H., D. V. Glover, and C. Y. Tsai. Nucleoside diphosphate glucose pyrophosphorylase isoenzymes of developing normal, brittle-2, and shrunken-2 endosperms of Zea mays L. *Crop Sci.* 12: 510-514. 1972.
- Weber, D. F. and D. E. Alexander. Redundant segments in Zea mays detected by translocations of monoploid origin. *Genetics* 71: s67. 1972. (Abstr.)
- Wersuhn, G. Ontogenetic changes in the course of mitosis in adventitious roots of Zea mays. *Biol. Zentralblatt* 90: 157-159. 1971.
- Wheeler, H., A. S. Williams and L. D. Young. Helminthosporium maydis T-toxin as an indicator of resistance to southern corn leaf blight. *Plant Disease Repr.* 55: 667-671. 1971.
- Widstrom, N. W. Reciprocal differences and combining ability for corn ear-worm injury among maize single crosses. *Crop Sci.* 12: 245-247. 1972.
- Widstrom, N. W., B. R. Wiseman, and W. W. McMillian. Resistance among some maize inbreds and single crosses to fall armyworm injury. *Crop Sci.* 12: 290-293. 1972.
- Widstrom, N. W., B. R. Wiseman, and W. W. McMillian. Genetic parameters for earworm injury in maize populations with Latin American germ plasm. *Crop Sci.* 12: 358-360. 1972.
- Wiggin, H. C. High lysine maize. *Ceres* 4: 57. 1971.
- Williams, E. and R. A. Brink. The effect of abnormal chromosome 10 on transposition of modulator from the R locus in maize. *Genetics* 71: 97-110. 1972.
- Wimalajeewa, D. L. S. and J. E. DeVay. The occurrence and characterization of a common antigen relationship between Ustilago maydis and Zea mays. *Physiol. Plant Path.* 1: 523-535. 1971.
- Wolf, M. J., H. C. Cutler, M. S. Zuber and U. Khoo. Maize with multilayer aleurone of high protein content. *Crop Sci.* 12: 440-442. 1972.
- Wolff, F. de. Techniques for the vegetative propagation of maize (Zea mays L.). *Euphytica* 20: 524-526. 1971.
- Yang, N. S. and J. G. Scandalios. Developmental genetics of malate dehydrogenase isozymes in maize. *Genetics* 71: s70. 1972. (Abstr.)
- Yu, M. H. and P. A. Peterson. Location-dependent, intragenic recombination in maize. *Genetica* 42: 368-380. 1971.
- Zuber, M. S. The inheritance of protein and starch synthesis in corn. *Cereal Science Today* 16: 290. 1971. (Abstr.)
- Zuber, M. S., W. J. Murphy, and E. W. Palm. Missouri system monitors corn disease. *Crops and Soils*: 26. 1972.