

Pathology

Compiled by Dr. D. W. Burke  
 USDA, ARS, Irrigated Agriculture Research  
 and Extension Center, Prosser, Washington 99350

- Abawi, G. S., and R. G. Grogan. 1974. Ascospores of Whetzelinia sclerotiorum as primary inoculum causing white mold of beans in New York. *Phytopathology* 64 (5): 578.
- Adams, D. B., and C. W. Kuhn. 1974. High temperature alters cowpea resistance to southern bean mosaic virus. *Bull. Ga. Acad. Sci.* 32 (1-2): 4.
- Albersheim, P., and B. S. Valent. 1974. Host-pathogen interactions. VII. Plant pathogens secrete proteins which inhibit enzymes of the host capable of attacking the pathogen. *Plant Physiol.* 53 (5): 684-687.
- Alconero, R., and J. P. Meiners. 1974. The effect of environment on the response of bean cultivars to infection by strains of bean common mosaic virus. *Phytopathology* 64 (5): 679-682.
- Anderson, F. N., J. R. Steadman, D. P. Coyne, and H. F. Schwartz. 1974. Tolerance to white mold in Phaseolus vulgaris dry edible bean types. *Plant Dis. Repr.* 58 (9): 782-784.
- Aota, J., and T. Mano. 1973. Detection of kidney bean blight pathogen in soil. *Ann. Phytopathol. Soc. Jap.* 39 (2): 151-152.
- Araki, T., and I. Sato. 1973. Conditions for inoculation of pathogens of roots of beans. *Ann. Phytopathol. Soc. Jap.* 39 (2): 154.
- Ayonoadu, U. W. U. 1974. Races of bean anthracnose in Malawi. *Turrialba* 24 (3): 311-314.
- Bailey, J. A. 1974. The relationship between symptom expression and phytoalexin concentration in hypocotyls of Phaseolus vulgaris infected with Colletotrichum lindemuthianum. *Physiol. Plant Pathol* 4 (4): 477-488.
- Ballantyne, B. 1974. Resistance to rust Uromyces appendiculatus in beans Phaseolus vulgaris. *Proc. Linn. Soc. N. S. W.* 98 (3): 107-121.
- Behncken, G. M. and G. J. P. McCarthy. 1973. Peanut mottle virus. in peanuts, navy beans and soybeans. *Queensl. Agric. J.* 99 (12): 635-639.
- Bird, J., J. Sanchez, R. L. Rodriguez, A. Cortes-Monllor and W. Kaiser. 1974. A mosaic of beans (Phaseolus vulgaris L.) caused by a strain of common cucumber mosaic virus. *J. Agric. Univ. P. R.* 58 (2): 151-161.

- Box, L., and D. Z. Maat. 1974. A strain of cucumber mosaic virus. Seed transmitted in beans. *Neth. J. Plant Pathol.* 80 (4): 113-123.
- Brown, M. E. 1974. Seed and root bacterization. Baker, Kenneth F. (Ed.). Annual review of phytopathology, Vol. 12. viii+502 p. Illus. Annual Reviews, Inc.: Palo Alto, CA, USA 181-197.
- Burden, R. S., J. A. Bailey, and G. G. Vincent. 1974. Metabolism of phaseollin by Colletotrichum lindemuthianum. *Phytochemistry* 13 (9): 1789-1791.
- Burden, R. S., P. M. Rogers, and R. L. Wain. 1974. Investigations on fungicides. XVI. Natural resistance of plant roots to fungal pathogens. *Ann. Appl. Biol.* 78 (1): 59-63.
- Burke, D. W., and J. M. Kraft. 1974. Responses of beans and peas to root pathogens accumulated during monoculture of each crop species. *Phytopathology* 64 (4): 546-549.
- Burns, R., and R. Scheffer. 1972. Evaluacion preliminar para resistencia a roya y mosaico comun en frijol. (Preliminar evaluation for rust and common mosaic resistance in beans.). *Avances en Investigacion* 1 (2): 9-20.
- Civerolo, E. L. 1974. Temperature effects on the relationships between Xanthomonas pruni and its virulent phages. *Phytopathology* 64 (9): 1248-1255.
- Coyne, D. P., and M. L. Schuster. 1973. Genetic causes of the tolerance of Phaseolus vulgaris to 3 bacterial diseases. *Agron. Trop. Ser. Riz. Rizic. Cult. Vivrieres Trop.* 28 (1): 89.
- Coyne, D. P., and M. L. Schuster. 1974. Breeding and genetic studies of tolerance to several bean (Phaseolus vulgaris L.) bacterial pathogens. *Euphytica* 23 (3): 651-656.
- Coyne, D. P., and M. L. Schuster. 1974. Differential reaction of pods and foliage of beans (Phaseolus vulgaris) to Xanthomonas phaseoli. *Plant Dis. Rept.* 58 (3): 278-282.
- Coyne, D. P., and M. L. Schuster. 1974. Inheritance and linkage relations of reaction to Xanthomonas phaseoli (E. F. Smith) Dowson (Common blight), stage of plant development and plant habit in Phaseolus vulgaris L. *Euphytica* 23 (2): 195-204.
- Coyne, D. P., and M. L. Schuster. 1974. Linkage studies of plant habit photoperiod response and tolerance to Xanthomonas phaseoli in beans Phaseolus vulgaris. *Hort. Sci.* 9 (3 Sec 2).
- Coyne, D. P., J. R. Steadman, and F. N. Anderson. 1974. Effect of modified plant architecture of great northern dry bean varieties Phaseolus vulgaris on white mold severity and components of yield. *Plant Dis. Rep.* 58 (4): 379-382.

- Cruickshank, I. A. M., D. R. Biggs, D. R. Perrin, and C. P. Whittle. 1974. Phaseollin and phaseollidin relationships in infection droplets on endocarp of Phaseolus vulgaris. Physiol. Plant Pathol. 4 (2): 261-276.
- Davis, D. D., and L. Kress. 1974. The relative susceptibility of 10 bean cultivars to ozone. Plant Dis. Rep. 58 (1): 14-16.
- Davis, D. D., and S. H. Smith. 1974. Reduction of ozone sensitivity of pinto bean by bean common mosaic virus. Phytopathology 64 (3): 383-385.
- Deakin, J. R. 1974. Association of seed color with emergence and seed yield of snap beans. J. Am. Soc. Hort. Sci. 99 (2): 110-114.
- De Araujo, I. D. 1973. Identification of alpha race of Colletotrichum lindemuthianum and reactions on bean varieties of Phaseolus vulgaris. Pesqui Agropecu Bras Ser Agron. 8 (7): 159-162.
- Dickson, M. H., and G. S. Abawi. 1974. Resistance to Pythium ultimum in white seeded beans Phaseolus vulgaris. Plant Dis. Rep. 58 (9): 774-776.
- Dixon, G. R. and J. K. Doodson. 1973. A technique used for testing dwarf french bean cultivars for resistance to anthracnose. J. Natl. Inst. Agric. Bot 13 (1): 87-89.
- Dunning, J. A., and W. W. Heck. 1973. Response of pinto bean and tobacco to ozone as conditioned by light intensity and or humidity. Environ. Sci. Technol. 7 (9): 824-826.
- Ednie, A. B., and S. M. Needham. 1973. Laboratory test for internally borne Xanthomonas phaseoli and Xanthomonas phaseoli variety fuscans in field bean (Phaseolus vulgaris L.) seed. Proc. Assoc. Off. Seed Analy. 63: 76-82.
- Ekpo, E. J. A., and A. W. Saettler. 1974. Distribution pattern of bean common mosaic virus in developing bean seed. Phytopathology 64 (2): 269-270.
- Ellis, M. A., and J. B. Sinclair. 1974. Uptake and translocation of streptomycin by soybean seedlings. Pl. Dis. Repr. 58 (6): 534-535.
- Ercolani, G. L., D. J. Hagedorn, A. Kelman, and R. E. Rand. 1974. Epiphytic survival of Pseudomonas syringae on hairy vetch in relation to epidemiology of bacterial brown spot of bean in Wisconsin. Phytopathology 64 (10): 1330-1339.
- Fassuliotis, G., and J. R. Deakin. 1973. Stem galls on root-knot nematode resistant snap beans. J. Am. Soc. Hortic. Sci. 98 (5): 425-427.

- Fries, R. E., and E. L. Bergman. 1973. Effect of bean yellow mosaic virus and tomato ringspot virus on growth and nutrition of kidney beans Phaseolus vulgaris. Hort. Science 8 (3): 279.
- Gamez, R. 1973. Bean viruses in Central America. III. Strains of the common bean mosaic virus in El Salvador and Nicaragua. Turrialba 23 (4): 475-476.
- Gonzalez, L. C. 1973. Leaf spot disease in beans (Phaseolus vulgaris) caused by alternaria sp. in Costa Rica. Turrialba 23 (2): 238-239.
- Hampton, R. O., and P. A. Koepsell. 1972. Bean necrosis disease. F. S. Coop. Ext. Serv. Oreg. State Univ. Oreg. 212, 2 p.
- Hagedorn, D. J., and E. K. Wade. 1974. Bean rust and angular leaf spot in Wisconsin. Plant Dis. Rep. 58 (4): 330-332.
- Hagita, T., T. Senkita, M. Kojima, E. Shigata, and T. Murayama. 1973. Seed contagion of kidney bean mosaic virus. Ann Phytopathol. Soc. Jap. 39 (2): 152.
- Hartmann, R. W. 1970. Breeding for root-knot nematode resistance in beans Phaseolus vulgaris. Proc. Int. Hortic. Cong. 1. 127.
- Hoch, H. C., and D. J. Hagedorn. 1974. Studies on chemical control of bean root and hypocotyl rot in Wisconsin. Plant Dis. Rep. 58 (10): 941-944.
- Horvath, J., and K. Hunyadi. 1973. Studies on the effect of herbicides on virus multiplication part 1 effects of trifluralin to alfalfa mosaic and tobacco mosaic viruses on Phaseolus vulgaris cultivar Pinto. Acta Phytopathol. Acad. Sci. Hung 8 (3-4): 347-350.
- Hsieh, S. P. Y., I. W. Buddenhagen and H. E. Kauffman. 1974. An improved method for detecting the presence of Xanthomonas oryzae in rice seed. Phytopathology 64 (2): 273-274.
- Hubbeling, N. 1973. Field resistance in Phaseolus beans to Pseudomonas phaseolicola. Meded Fac Landouwwet Rijksuniv Gent. 38 (3): 1351-1363.
- Inoue, T. 1973. Characteristics of bean yellow mosaic virus. Ann. Phytopathol. Soc. Jap. 39 (2): 165.
- Ito, M. U. UI. 1973. Pathogenicity of Fusarium solani f. sp. phaseoli growing in substrates with different carbon nitrogen ratios. Ann. Phytopathol. Soc. Jap. 39 (2): 148-149.
- Jackson, M. B., C. B. Hartley, and D. J. Osborne. 1973. Timing abscission in Phaseolus vulgaris by controlling ethylene production and sensitivity to ethylene. New Phytol. 72 (6): 1251-1260.

- Jhooty, J. S., and S. S. Bains. 1972. Evaluation of different systemic and nonsystemic fungi toxicants for the control of damping-off of mung Phaseolus aureus caused by Rhizoctonia solani. Indian Phytopathol. 25 (4): 509-512.
- Kaiser, W. J., and G. H. Mossahebi. 1974. Natural infection of mung bean by bean common mosaic virus. Phytopathology 64 (9): 1209-1214.
- Kaul, J. L. 1974. Comparative effect of long storage after various treatments on the viability and mycoflora of bean (Phaseolus vulgaris) seeds. Indian J. Mycol. Plant Pathol. 3 (1): 17-20.
- Keeling, B. L. 1974. Soybean seed rot and the relation of seed exudate to host susceptibility. Phytopathology 64 (11): 1445-1447.
- Keenan, J. G., H. D. Moore, N. Oshima, and L. E. Jenkins. 1974. Effect of bean root rot Fusarium solani phaseoli on dryland pinto bean production in Southwestern Colorado. Plant Dis. Rep. 58 (10): 890-892.
- Keim, R., and R. K. Webster. 1974. Effect of soil moisture and temperature on viability of sclerotia of Sclerotium oryzae. Phytopathology 64 (12): 1499-1502.
- Kim, S. H., J. G., Kantzes, and L. O. Weaver. 1974. Infection of above ground parts of bean by Pythium aphanidermatum. Phytopath. 64 (3): 373-380.
- Kolte, S. J., and Y. L. Nene. 1972. Studies on symptoms and mode of transmission of the leaf crinkle virus of urb bean Phaseolus mungo. Indian Phytopathol. 25 (3): 401-404.
- Kraft, J. M. 1974. The influence of seedling exudates on the resistance of peas to Fusarium and Pythium root rot. Phytopath. 64 (2): 190-193.
- Kraft, J. M., and D. W. Burke. 1974. Behavior of Fusarium solani f. sp. psi and Fusarium solani f. sp. phaseoli individually and in combinations on peas and beans. Pl. Dis. Repr. 58 (6): 500-504.
- Kuhn, C. W. 1973. 2 thio uracil induced changes in alfalfa mosaic virus infectivity and nucleo protein components in hypersensitive bean. Phytopathology 63 (10): 1235-1238.
- Kvicala, B. A. 1974. The size growth of alfalfa mosaic virus lesions on french bean leaves, Phaseolus vulgaris L., under various pre- and post-inoculation heat treatment. Phytopathol. Z. 80 (2): 143-147.
- Lampthey, P. N. L., and R. I. Hamilton. 1974. A new cowpea strain of southern bean mosaic virus from Ghana. Phytopathology 64 (8): 1100-1104.

- Leon, C., and L. Calot. 1973. Effect of bean mosaic virus (BMV) on yield in two commercial kidney bean varieties (Phaseolus vulgaris). An Soc. Cient. Argent. 196 (1/6): 21-27.
- Lockhart, B. E. L, and H. U. Fischer. 1974. Chronic infection by seedborne bean common mosaic virus in Morocco. Plant Dis. Rep. 58 (4): 307-308.
- Mack, A. R., and V. R. Wallen. 1974. Effects of various field levels of soil temperature and soil moisture on the growth of beans infected with bacterial blight. Can. J. Soil Sci. 54 (2): 149-158.
- Maino, A. L., M. N. Schroth, and V. B. Vitanza. 1974. Synergy between Achromobacter-sp and Pseudomonas phaseolicola resulting in increased disease. Phytopathology 64 (3): 277-283.
- Manning, W. J., W. A. Feder, and P. M. Vardaro. 1974. Suppression of oxidant injury by benomyl effects on yields of bean cultivars in the field. J. Environ. Qual. 3 (1): 1-3.
- Mansfield, J. W., and R. Sexton. 1974. Changes in the localization of beta-glycerophosphatase activity during the infection of Phaseolus vulgaris beans by Colletotrichum lindemuthianum. Ann. Bot. 38 (156): 711-717.
- McDonald, J. G., and R. I. Hamilton. 1973. Analytical density-gradient centrifugation of southern bean mosaic virus from seedcoats of Phaseolus vulgaris. Virology 56 (1): 181-188.
- McMillan, R. T., Jr. 1974. Bean white mold control. Proc. Fla. State Hort. Soc. 86: 165-166.
- Mendgen, K. 1973. Details of Uromyces phaseoli infection structure. Phytopathol. Z. 78 (2): 109-120.
- Mercer, P. C., and R. K. S. Wood, and A. D. Greenwood. 1974. Resistance to anthracnose of french bean. Peat Plant News 4 (3): 291-306.
- Miller, D. E., and D. W. Burke. 1974. Influence of soil bulk density and water potential on Fusarium root rot of beans. Phytopathology 64 (4): 526-529.
- Mink, G. I., and P. E. Thomas. 1974. Purification of curly top virus. Phytopathology 64 (1): 140-142.
- Moffett, M. L. 1973. Seed transmission of Pseudomonas phaseolicola halo blight in Macroptilium atropurpureum cultivar Siratro. Trop. Grassl. 7 (2): 195-199.
- Mumford, D. L. 1974. Purification of curly top virus. Phytopathology 64 (1): 136-139.

- Ngundo, B. W., and D. P. Taylor. 1974. Effects of *Meloidogyne* spp. on bean yields in Kenya. *Pl. Dis. Repr.* 58 (11): 1020-1023.
- Oblisami, G., and C. Balagopal. 1973. The phyllosphere microflora of *Phaseolus vulgaris* L. infected with common bean mosaic virus. *Madras Agric. J.* 60 (7): 478-480.
- O'Brien, F., and R. K. S. Wood. 1973. Role of ammonia in infection of *Phaseolus vulgaris* by *Pseudomonas* spp. *Physiol. Plant Pathol.* 3 (3): 315-325.
- Panopoulos, M. J. and M. N. Schroth. 1974. Role of flagellar motility in the invasion of bean leaves by *Pseudomonas phaseolicola*. *Phytopathology* 64 (11): 1389-1397.
- Papendick, R. I., and R. J. Cook. 1974. Plant water stress and development of *Fusarium* root rot in wheat subjected to different cultural practices. *Phytopathology* 64 (3): 358-363.
- Patel, P. N., and J. K. Jindal. 1972. Bacterial leaf spot and halo blight disease of mung bean *Phaseolus aureus* and other legumes in India. *Indian Phytopathol.* 25 (4): 517-525.
- Patel, P. N., and J. K. Jindal. 1972. Occurrence of bacterial blight disease on moth bean *Phaseolus aconitifolius* in India. *Indian Phytopathol.* 25 (3): 464-466.
- Patel, P. N., J. K. Jindal, and D. Singh. 1972. Studies on resistance in crops to bacterial diseases in India, Part 4. Resistance in mung bean *Phaseolus aureus* to *Xanthomonas phaseoli*. *Indian Phytopathol.* 25 (4): 526-529.
- Patil, S. S., A. C. Hayward, and R. Emmons. 1974. An ultraviolet-induced nontoxigenic mutant of *Pseudomonas phaseolicola* of altered pathogenicity. *Phytopathology* 64 (5): 590-595.
- Paxton, J., D. J. Goodschild, and I. A. M. Cruickshank. 1974. Phaseollin production by live bean endocarp. *Physiol. Plant Pathol.* 4 (2): 167-171.
- Ploaie, P. G., and Z. Petre. 1972. Necrosis of the bean a new viral disease in Romani. *Stud. Cercet. Biol. Ser. Bot.* 24 (5): 427-432.
- Porto, M. D. M., and D. J. Hagedorn. 1974. Susceptibility of *Phaseolus lathyroides* to soybean mosaic virus. *Plant Dis. Rep.* 58 (4): 322-326.
- Prasad, K., and J. L. Weigle. 1973. Effect of *Rhizoctonia solani* on emergence of *Phaseolus vulgaris* cultivars. *Hort. Science* 8 (3): 253.
- Prisco, J. T., and J. W. O'Leary. 1973. The effects of humidity and cytokinin on growth and water relations of salt-stressed bean plants. *Plant Soil* 39 (2): 263-276.

- Provvidenti, R. 1974. Inheritance of resistance to watermelon mosaic virus 2 in Phaseolus vulgaris. *Phytopathology* 64 (11): 1448-1450.
- Provvidenti, R., and A. L. Granett. 1974. Sweet violet, a natural host of bean yellow mosaic virus. *Pl. Dis. Repr.* 58 (2): 155-156.
- Renaud-C, J., and I. Thomason. 1973. Nematodes associated with common bean Phaseolus vulgaris in California. *Nematropica*. 3 (1): 7
- Rahe, J. E. 1973. Occurrence and levels of the phytoalexin phaseollin in relation to delimitation at sites of infection of Phaseolus vulgaris by Colletotrichum lindemuthianum. *Can. J. Bot.* 51 (12): 2423-2430.
- Rankov, V. 1973. What are the effects of different fungicides on *Rhizobium* sp. and nodulation of the roots of leguminous plants? *Acta Agron.* 22 (3/4): 464-466.
- Rodriguez-Kabana, R. R., P. A. Backman, and E. A. Wiggins. 1974. Determination of sclerotial populations of Sclerotium rolfsii in soil by a rapid flotation-sieving technique. *Phytopathology* 64 (5): 610-615.
- Rotem, J., Y. Ben-Joseph, and R. Reuveni. 1973. Design and use of an automatic humidity chamber in phytopathological research. *Phytoparasitica* 1 (1): 39-45.
- Sarafi, A., and M. Okhovat. 1972. Resistance of five varieties of bean to three isolates of Rhizoctonia solani. *Publ. Fac. Agron. Univ. Teheran* 4 (3): 49-55.
- Saydam, C., M. Copcu, and O. Yalcin. 1974. Two new hosts of *Verticillium dahliae* Kleb. in Turkey (includes P. vulgaris!). *J. Turk. Phytopathol.* 3 (1/2): 77.
- Schreiber, F. 1970. Creation of horticultural beans resistant to anthracnosis. *Proc. Int. Hortic. Congr.* 1. 126-127.
- Schuster, M. L., and D. P. Coyne. 1974. Survival mechanisms of phytopathogenic bacteria. *Ann. Rev. Phytopath.* 12: 199-221.
- Short, G. E., and M. L. Lacy. 1974. Germination of Fusarium solani f. sp. psii chlamydospores in the spermosphere of pea. *Phytopathol.* 64 (4): 558-562.
- Silbernagel, M. J., and A. M. Jafri. 1974. Temperature effects on curly top resistance in Phaseolus vulgaris. *Phytopathology* 64 (6): 825-827.
- Silbernagel, M. J., and W. J. Zaumeyer. Beans. Breeding for disease resistance. In Nelson, R. R. (Editor) *Breeding plants for*



- disease resistance, concepts and applications. p. 253-269. The Penn. State Univ. Press Univ. Park and London.
- Skipp, R. A., and B. J. Deverall. 1973. Studies on cross protection in the anthracnose disease of bean. *Physiol. Plant Pathol.* 3 (3): 299-313.
- Sohi, H. S. and R. D. Sharma. 1974. Mode of survival of Isariopsis griseola the causal agent of angular leaf spot of beans. *Indian J. Hortic.* 31 (1): 110-113.
- Sohi, H. S., and R. Dass. 1970. Relative resistance and susceptibility of different varieties of Phaseolus vulgaris to angular leaf spot disease caused by Isariopsis griseola. *Proc. Int. Hortic. Congr.* 1. 126.
- Sosa Moss, C., and J. S. Camacho Guerrero. 1973. Protection of string beans from Meloidogyne incognita by chemical treatment of the seed. *Nematropica* 3 (1): 12-13.
- Sos Moss, C., and C. J. M. Torres. 1973. Response of string bean Phaseolus vulgaris cultivar Black-Valentine to 7 levels of population of Meloidogyne incognita nematoda heteroderidae. *Nematropica* 3 (1): 17-18.
- Sos Moss, C., and A. H. Weihs. 1973. Use of sugar cane molasses on string bean to combat Meloidogyne incognita nematoda heteroderidae. *Nematropica* 3 (1): 18-19.
- Spalding, D. H., and W. F. Reeder. 1974. Postharvest control of *Sclerotinia* rot of snap bean pods with heated and unheated chemical dips. *Plt. Dis. Reprtr.* 58: 59-62.
- Spotts, R. A., F. L. Lukezic, and N. L. Lacasse. 1974. The effect of cholesterol and a steroid inhibitor on the resistance of pinto bean to ozone. *Phytopathology* 64 (5): 586.
- Steadman, J. R., and G. E. Cook. 1974. A simple method for collecting ascospores of Whetzelinia sclerotiorum. *Pl. Dis. Reprtr.* 58 (2): 190.
- Stoker, R. 1974. Effect on dwarf beans of water stress at different phases of growth. *N. Z. J. Exp. Agric.* 2 (1): 13-15.
- Sumner, D. R. 1974. Interactions of herbicides and nematicides with root diseases of snapbean and southern pea. *Phytopathology* 64 (10): 1353-1358.
- Tamada, T., T. Baba, and T. Murayama. 1973. Kidney bean yellows disease due to soybean dwarfism virus Y. *Ann. Phytopathol. Soc. Jap.* 39 (2): 152.
- Tanii, A., T. Narita, Y. Akari, and T. Baba. 1973. Red bean bacterial stem rot. *Ann. Phytopathol. Soc. Jap.* 39 (2): 151.

- Thresh, J. M. 1974. Vector relationships and the development of epidemics: The epidemiology of plant viruses. *Phytopathology* 64 (8): 1050-1056.
- Tomlinson, H., and S. Rich. 1974. Ozone injury and senescence of bean leaves inhibited by phenyl urea. *Phytopathology* 64 (5): 587.
- Ueda, K., M. Kojima, E. Shigata, and T. Murayama. 1973. Kidney bean yellow spot mosaic virus. *Ann. Phytopathol. Soc. Jap.* 39 (2): 152.
- Van Den Heuvel, J., and H. D. Van Etten. 1973. Detoxification of phaseollin by Fusarium solani f. sp. phaseoli. *Physiol. Plant Pathol.* 3 (3): 327-339.
- Van Den Heuvel, J., H. D. Van Etten, J. W. Serum, D. L. Coffen, and T. H. Williams. 1974. Identification of 1-alpha hydroxy phaseollone a phaseollin metabolite produced by Fusarium solani f. sp. phaseoli. *Phytochemistry* 13 (7): 1129-1131.
- Van Etten, H. D. 1973. Identification of a 2nd anti-fungal isoflavan from diseased Phaseolus vulgaris tissue. *Phytochemistry* 12 (7): 1791-1792.
- Vasiloff, G. N., and D. B. Drummond. 1974. The effectiveness of road dust as a protective agent on buckwheat and pinto bean against sulfur dioxide and ozone. *Phytopathology* 64 (5): 588.
- Venkataraman, S., and N. S. Subra Rao. 1974. Strain variations of *Rhizobium* sp. cowpea group from root nodules of healthy and yellow mosaic virus infected Phaseolus aureus plants. *Phytopathol. Z.* 80 (1): 29-34.
- Wimalajeewa, D. L. S., and P. Thavam. 1973. Fungicidal control of bean rust disease. *Trop. Agric. (Colombo)* 129 (1/2): 61-66.
- Yarwood, C. E. 1974. Cold therapy of bean rust. *Phytopathology* 64 (7): 1044-1046.
- Yarwood, C. E. 1974. Habitats of *Thielaviopsis* in California. *Pl. Dis. Repr.* 58: 54-56.
- Yarwood, C. E., and I. Karayiannis. 1974. Thielaviopsis basicola may increase plant growth. *Plant Dis. Rep.* 58 (6): 490-492.
- Young, J. M. 1974. Development of bacterial populations in vivo in relation to plant pathogenicity. *N. Z. J. Agric. Res.* 17 (1): 105-113.
- Young, J. M. 1974. Effect of water on bacterial multiplication in plant tissue. *N. Z. J. Agric. Res.* 17 (1): 115-119.
- Zeller, W., K. Rudolph, and W. H. Fuchs. 1973. Permeability alterations in resistant and susceptible bean varieties inoculated with Pseudomonas phaseolicola. *Phytopathol. Z.* 77 (4): 363-372.

Zettler, F. W., and I. R. Evans. 1972. Blackeye cowpea mosaic virus in Florida host range and incidence in certified cowpea seed. Proc. Fla. State Hort. Soc. 85: 99-101.

\*\*\*\*\*

### Entomology

Compiled by Dr. D. W. Burke  
 USDA, ARS, Irrigated Agriculture Research  
 and Extension Center, Prosser, Washington 99350

- Agarwal, K. B., H. N. Mehrotra, and B. K. Kaul. 1973. Effect of organic insecticides on cytology of bean Phaseolus vulgaris. Labdev. J. Sci. Technol. Part B Life Sci. 11 (3-4): 67-69.
- Ayonoadu, U. W. U. 1974. Races of bean anthracnose in Malawi. Turrialba 24: 311-314.
- Beute, M. K. 1974. A quantitative technique for the extraction of soil-inhabiting mites (Acarina) and springtails (Collembola) associated with pod rot disease of peanut. Phytopathology 64 (4): 571-572.
- Campbell, W. V., and D. A. Emery. 1972. Anatomical and chemical characteristics of peanuts associated with resistance to an insect complex. J. Elisha Mitchell Sci. Soc. 88 (4): 195-196.
- Dabrowski, Z. T. 1973. Feeding response of the two-spotted spider mite to SCME plant components. Daniel, Milan and Bohumir Rosicky. Proceedings of the 3rd International Congress of Acarology. Prague, Czechoslovakia, Aug. 31 - Sept. 6, 1971. 837 p. Illus. Maps. Dr. W. Junk B. V., Publishers: The Hague, The Netherlands. 211-215.
- Diaz, C. G. 1973. Chemical control of the bean cicada Empoasca fabae homoptera cicade llidae in the region of the Bajio. Folia Entomol Mex. 25-26. 64.
- Eckenrode, C. J., R. J. Kuhr, and A. A. Khan. 1974. Treatment of seeds by solvent infusion for control of the seedcorn maggot. J. Econ. Entomol. 67 (2): 284-286.
- Eckenrode, D. J., N. L. Gauthier, D. Danielson, and D. R. Webb. 1973. Seed corn maggot seed treatment and granule furrow applications for protecting beans and sweet corn. J. Econ. Entomol. 66 (5): 1191-1194.
- Elden, T. C., J. A. Schillinger, and A. L. Steinhauer. 1974. Field and laboratory selection for resistance in soybeans to the Mexican bean beetle. Environ. Entomol. 3 (5): 785-788.
- Hagen, A. F. 1974. Mexican bean beetle control with systematic insecticides on dry beans in Western Nebraska. J. Econ. Entomol. 67 (91): 137.