

14. Dulmage, H. T. Economics of microbial control. Chapter 26, pp 281-290. In: Microbial control of insects and mites. H. D. Burgess and N. W. Hussey, eds. In: Academic Press, London, 1971.

15. Dulmage, H. T., Wolfenbarger, D. A., Lukashr, M. G., and Correa, J. A. Field tests with the HD-1 formulation of the d-endotoxin of *Bacillus thuringiensis* against the cabbage looper on cabbage. *J. Econ. Entomol.* 64:1421-1422.

16. Dulmage, H. T., Beeding, O. P., Rehndorf, C. S., and Hansen, G. D. A proposed standardized bioassay for formulations of *Bacillus thuringiensis* based on the international unit. *J. Invertebr. Pathol.* 18:240-245, 1971.

17. Dulmage, H. T. Production of d-endotoxin by eighteen isolates of *Bacillus thuringiensis*, serotype 3, in 3 fermentation media. *J. Invertebr. Pathol.* 18:353-358, 1971.

18. Dulmage, H. T. Pathogens. In: Distribution, abundance, and control of *Heliothis* species in cotton and other host plants. South. Coop. Ser. Bull. 1969, pp 57-64, 1972.

19. Hall, I. M., Dulmage, H. T., and Arakawa, K. Y. The susceptibility of the eye spot *Niphaeus caryocarpus* to entomogenous bacteria and fungi. *J. Invertebr. Pathol.* 15:29-31, 1972.

20. Hall, I. M., Dulmage, H. T., and Arakawa, K. Y. Laboratory tests with entomogenous bacteria and the fungus *Beauveria* against the little house fly species *Fannia conicularis* and *F. foveolaris*. *Environ. Entomol.* 1:102-107, 1972.

21. McGarr, R. I., Dulmage, H. T., and Wolfenbarger, D. A. Field tests with HD-1, d-endotoxin of *Bacillus thuringiensis*, and with chemical insecticides for control of the tobacco budworm and the bollworm in 1970. *J. Econ. Entomol.* 63:897-899, 1972.

22. Wolfenbarger, D. A., Guerra, A. A., Dulmage, H. T., and Garcia, R. D. Properties of the B-exotoxin of *Bacillus thuringiensis* IMC 10, 001 against the tobacco budworm. *J. Econ. Entomol.* 65:1245-1248, 1972.

23. Dulmage, H. T., Correa, J. A., and Martinez, A. J. Certain microbial insecticides and methods of formulation thereof. U. S. Patent No. 3,702,359, 1972.

24. Dulmage, H. T. Assay and standardization of microbial insecticides. *Ann. N. Y. Acad. Sci.* 217:187-199, 1973.

25. Dulmage, H. T. and Martinez, E. The effects of continuous exposure to low concentrations of the d-endotoxin of *Bacillus thuringiensis* on the development of the tobacco budworm, *Heliothis virescens*. *J. Invertebr. Pathol.* 22:14-22, 1973.

26. Dulmage, H. T. and de Barjac, H. HD-187, a new isolate of *Bacillus thuringiensis* that produces high yields of d-endotoxin. *J. Invertebr. Pathol.* 22:273-277, 1973.

27. Dulmage, H. T. *B. thuringiensis* U. S. Assay Standard. Report on the adoption of a primary U. S. reference standard for assay of formulations containing the d-endotoxin of *Bacillus thuringiensis*. *Bull. Entomol. Soc. Am.* 19:200-202, 1973.

28. Milan, C. M. and Dulmage, H. T. Transmission del virus poliedrico de *Heliothis virescens* (Fabricus) de generacion a generacion. *Folia Entomol. Mex.* 29:61-62, 1974.

29. Dulmage, H. T. The standardization of formulations of the d-endotoxins produced by *Bacillus thuringiensis*. *J. Invertebr. Pathol.* 25:279-281, 1975.

30. Mery, C. and Dulmage, H. T. Transmission, diagnosis, and control of cytoplasmic polyhedrosis virus in colonies of *Heliothis virescens*. *J. Invertebr. Pathol.* 25:75-79, 1975.

31. Dulmage, H. T., Martinez, A. J., and Pena, T. Bioassay of *Bacillus thuringiensis* (Berliner) d-endotoxin using the tobacco budworm. *U. S. Dept. Agric. Tech. Bull.* # 1528, 16 pp. 1976.

32. Burgerjon, A. and Dulmage, H. T. Industrial and international standardization of microbial pesticides -- I. *Bacillus thuringiensis*. *Entomophaga* 22:121-129, 1977.

33. Dulmage, H. T. and Burgerjon, A. Industrial and international standardization of microbial pesticides -- II. Insect viruses. *Entomophaga* 22:131-139, 1977.

34. Hall, I. M., Arakawa, K. Y., Dulmage, H. T., and Correa, J. A. The pathogenicity of strains of *Bacillus thuringiensis* to larvae of *Aedes* and to *Culex* mosquitoes. *Mosquito News.* 37:246-251, 1977.

35. Dulmage, H. T., Graham, H. M., and Martinez, E. Interactions between the tobacco budworm, *Heliothis virescens*, and the d-endotoxin produced by the HD-1 isolate of *Bacillus thuringiensis* var. *kurstaki*: Relationship between length of exposure to the toxin and survival. *J. Invertebr. Pathol.* 32:40-50, 1978.

36. Dulmage, H. T. Production of bacteria for biological control of insects. pp 129-141. In: Papavizas, G. C. (ed) Biological control in crop production. BAR Symposium number 9. Billenfield, Osmon, Totowa, 1981.



25. Dulmage, H. T. and Martinez, E. The effects of continuous exposure to low concentrations of the d-endotoxin of *Bacillus thuringiensis* on the development of the tobacco budworm, *Heliothis virescens*. *J. Invertebr. Pathol.* 22:14-22. 1973.

26. Dulmage, H. T. and de Barjac, H. HD-187, a new isolate of *Bacillus thuringiensis* that produces high yields of d-endotoxin. *J. Invertebr. Pathol.* 22:273-277. 1973.

27. Dulmage, H. T. & *B. thuringiensis* U. S. Assay Standard. Report on the adoption of a primary U. S. reference standard for assay of formulations containing the d-endotoxin of *Bacillus thuringiensis*. *Bull. Entomol. Soc. Am.* 19:500-505. 1973.

28. Milan, C. M. and Dulmage, H. T. Transmission del virus polyedrico de *Heliothis virescens* (Fabricus) de generacion a generacion. *Folia Entomol. Mex.* 29:61-62. 1974.

29. Dulmage, H. T. The standardization of formulations of the d-endotoxins produced by *Bacillus thuringiensis*. *J. Invertebr. Pathol.* 25:279-281. 1975.

30. Mary, C. and Dulmage, H. T. Transmission, diagnosis, and control of cytoplasmic polyhedrosis virus in colonies of *Heliothis virescens*. *J. Invertebr. Pathol.* 25:75-79. 1975.

31. Dulmage, H. T., Martinez, A. J., and Pena, T. Bioassay of *Bacillus thuringiensis* (Berliner) d-endotoxin using the tobacco budworm, U. S. Dept. Agric. Tech. Bull. W 1528. 16 pp. 1976.

32. Burgerston, A. and Dulmage, H. T. Industrial and international standardization of microbial pesticides -- I. *Bacillus thuringiensis*. *Entomophaga* 22:121-129. 1977.

33. Dulmage, H. T. and Burgerston, A. Industrial and international standardization of microbial pesticides -- II. Insect viruses. *Entomophaga* 22:131-139. 1977.

34. Hall, I. M., Arakawa, K. Y., Dulmage, H. T., and Correa, J. A. The pathogenicity of strains of *Bacillus thuringiensis* to larvae of *Aedes* and to *Culex* mosquitoes. *Mosquito News*. 37:248-251. 1977.

35. Dulmage, H. T., Graham, H. M., and Martinez, E. Interactions between the tobacco budworm, *Heliothis virescens*, and the d-endotoxin produced by the HD-1 isolate of *Bacillus thuringiensis* var. *kurstaki*: Relationship between length of exposure to the toxin and survival. *J. Invertebr. Pathol.* 32:40-50. 1978.

36. Dulmage, H. T. and Rivas, R. A survey of soil microorganisms, with particular reference to the actinomycetes as sources of substances toxic to *Heliothis virescens*. *J. Invertebr. Pathol.* 31:118-122. 1978.

37. Krywienczyk, J., Dulmage, H. T., and Fast, P. G. Occurrence of two serologically distinct groups within *Bacillus thuringiensis* serotype 3ab var. *kurstaki*. *J. Invertebr. Pathol.* 31:372-375. 1978.

38. Lacey, L. A., Mulla, M. S., and Dulmage, H. T. Some factors affecting the pathogenicity of *Bacillus thuringiensis* Berliner against blackflies. *Environ. Entomol.* 7:583-588. 1978.

39. Vail, P. V., Jay, D. S., Stewart, F. D., Martinez, A. J., and Dulmage, H. T. Comparative susceptibility of *Heliothis virescens* and *H. zea* to the nuclear polyhedrosis virus isolated from *Autographa californica*. *J. Econ. Entomol.* 71:293-296. 1978.

40. Dulmage, H. T. Genetic manipulation of pathogens: Selection of different strains pp. 116-126. In Hoy, M. A. and McKelvey, J. J., Jr. (eds.) Genetics in relation to insect management. Working Papers - The Rockefeller Foundation, New York, N.Y. 1979.

41. Dulmage, H. T. Current technological and conceptual impediments to widescale use of microbial control agents. A. In vitro production. In: Proc. of workshop on insect pest management with microbial agents: Recent achievements, deficiencies, and innovations, IPRC, Ithaca, N. Y. pp 37-38. 1980.

42. Dulmage, H. T. and Cooperators. Insecticidal activity of isolates of *Bacillus thuringiensis* and their potential for pest control. Chapt. 11, pp 191-220. In: Burges, H. D. (ed). Microbial Control of Pests and Plant Diseases, 1970-1980. Academic Press, London. 1981.

43. Krywienczyk, J., Dulmage, H. T., Hall, I. M., Beegle, C. C., Arakawa, K. Y., and Fast, P. G. Occurrence of *kurstaki* k-1 crystal activity in *Bacillus thuringiensis* serotype 1. *J. Invertebr. Pathol.* 37:62-65. 1981.

44. Beegle, C. C., Dulmage, H. T., Wolfenbarger, D. A., and Martinez, E. Persistence of *Bacillus thuringiensis* Berliner insecticidal activity on cotton foliage. *Environ. Entomol.* 10:400-401. 1981.

45. Gonzalez, J. M., Jr., Dulmage, H. T., and Carlton, B. C. Correlation between specific plasmids and d-endotoxin production in *Bacillus thuringiensis*. *Plasmid*. 5:351-365. 1981.

46. Dulmage, H. T., Soper, R. S., and Smith, D. B. The use of bacteria and fungi in insect control. In: Proc. 1st Japan/USA Symp. on IPM, Tsukuba, Japan. pp. 112-127. 1981.

47. Dulmage, H. T. Production of bacteria for biological control of insects. pp 129-141. In: Papavizas, G. C. (ed). Biological control in crop production. BARD Symposium number 5. Allenheld, Osmun, Totowa, 1981.



36. Dulmage, H. T. and Rivas, R. A survey of soil microorganisms with particular reference to the actinomycetes as sources of substances toxic to *Heliothis virescens*. *J. Invertebr. Pathol.* 31:118-122. 1978.

37. Krywienczyk, J., Dulmage, H. T., and Fast, P. G. Occurrence of two serologically distinct groups within *Bacillus thuringiensis* serotype 3ab var. kurstaki. *J. Invertebr. Pathol.* 31:372-375. 1978.

38. Lacey, J. A., Mulla, M. S., and Dulmage, H. T. Some factors affecting the pathogenicity of *Bacillus thuringiensis* Berliner against blackflies. *Environ. Entomol.* 7:583-588. 1978.

39. Vafi, P. V., Jay, D. S., Stewart, F. D., Martinez, A. J., and Dulmage, H. T. Comparative susceptibility of *Heliothis virescens* and *H. zea* to the nuclear polyhedrosis virus isolated from *Aulopogon californica*. *Econ. Entomol.* 71:293-296. 1978.

40. Dulmage, H. T. Genetic manipulation of pathogens: Selection of different strains pp. 116-126. In Hoy, M. A. and McKevey, J. G. (eds.), *Genetics in relation to insect management*. Working Papers - The Rockefeller Foundation, New York, N.Y. 1979.

41. Dulmage, H. T. Current technological and conceptual impediments to widespread use of microbial control agents. A. In vitro production. In: Proc. of workshop on insect pest management with microbial agents: Recent achievements, deficiencies, and innovations. IARC, Ithaca, N.Y. pp. 37-38. 1980.

42. Dulmage, H. T. and Cooperators. Insecticidal activity of isolates of *Bacillus thuringiensis* and their potential for pest control. Chapt. II. pp. 121-220. In: Burges, H. D. (ed). *Microbial Control of Pests and Plant Diseases, 1970-1980*. Academic Press, London. 1981.

43. Krywienczyk, J., Dulmage, H. T., Hall, I. M., Beegle, C. C., Arakawa, K. Y., and Fast, P. G. Occurrence of kurstaki k-1 crystal activity in *Bacillus thuringiensis* serotype 1. *J. Invertebr. Pathol.* 37:62-65. 1981.

44. Beegle, C. C., Dulmage, H. T., Wolfenbarger, D. A., and Martinez, E. Persistence of *Bacillus thuringiensis* Berliner insecticidal activity on cotton foliage. *Environ. Entomol.* 10:400-401. 1981.

45. Gonzalez, G. M., Jr., Dulmage, H. T., and Carlton, B. C. Correlation between specific plasmids and delta-endotoxin production in *Bacillus thuringiensis*. *Plasmid* 5:351-355. 1981.

46. Dulmage, H. T., Soper, R. S., and Smith, D. B. The use of bacteria and fungi in insect control. In: Proc. 1st Japan/USA Symp. on IPM, Tsukuba, Japan. pp. 112-127. 1981.

47. Dulmage, H. T. Production of bacteria for biological control of insects. pp. 122-141. In: Papavizas, G. C. (ed). *Biological control in crop production*. BARC Symposium number 2. Altenfeld, Gsmun, Totowa, 1981.

48. Beegle, C. C., Dulmage, H. T., and Wolfenbarger, D. A. Relationships between laboratory bioassay-derived potencies and field efficacies of *Bacillus thuringiensis* isolates with different spectral activities. *J. Invertebr. Pathol.* 39:138-148. 1982.

49. Galan-Wong, Luis, Donaldson, G., Dulmage, H. T., and Rodriguez-Padilla, Cristina. Serotipos de *Bacillus thuringiensis* aislados de suelo en Mexico. In: Resumes XIII Congreso Nacional de Microbiologia, Universidad de Guanajuato. 35. 1982.

50. Galan-Wong, Luis, Maldonado, Blanco Guadalupe, y Dulmage, H. T. Jugo de agave como medio decultivo para obtener d-endotoxins de *Bacillus thuringiensis*. In: Resumes XIII Congreso Nacional de Microbiologica, Universidad de Guanajuato. p. 141. 1982.

51. Dulmage, H. T., Beegle, C. C., de Barjac, H., Reich, D., Donaldson, G., and Krywienczyk, J. *Bacillus thuringiensis* cultures available from the U. S. Department of Agriculture. Agric. Rev. Manuals, ARM-S-30/October, 1982. 41 pp. 1982.. 1982.

52. Dulmage, H. T. and Aizawa, K. Distribution of *Bacillus thuringiensis* in nature, Chapt. 4, pp 209-237. In: *Microbial and Viral Pesticides*, E. Kurstak, ed. Marcel Dekker, Inc. 1982.

53. Burges, H. D., Aizawai, K., Dulmage, H. T., and de Barjac, H. Numbering the H-serotypes of *Bacillus thuringiensis*. *J. Invertebr. Pathol.* 40:419. 1982.

54. Salama, H. S., Foda, M. S., Dulmage, H. T., and El-Sharaby. A. Novel fermentation media for production of delta-endotoxins from *Bacillus thuringiensis*. *J. Invertebr. Pathol.* 41:122-130. 1983.

55. Yamamoto, T., Garcia, J. A., and Dulmage, H. T. Immunological properties of entomocidal protein of *Bacillus thuringiensis* and its insecticidal activity. *J. Invertebr. Pathol.* 41:122-130. 1983.

56. Dulmage, H. T. Guidelines for production of *Bacillus thuringiensis* H-14. Proc. of Consultation, Geneva, Switzerland, 25-28 Oct. 1982. Eds. M. Vandekar and H. T. Dulmage, eds. 124 pp. UNDA/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases. 1983.

57. Davidson, E. W., Urbina, M., Payne, J., Mulla, M. S., Darwazeh, H., Dulmage, H. T., and Correa, J. A. Fate of *Bacillus sphaericus* 2593 and 2362 spores used as larvicides in the aquatic environment. *Appl. Environ. Microbiol.* 47:125-129. 1984.

58. Mulla, M. S., Darwazeh, H. A., Davidson, E. W., and Dulmage, H. T. Efficacy and persistence of the microbial agent *Bacillus sphaericus* against mosquito larvae in organically enriched habitats. *Mosquito News.* 44:167-173. 1984.



59. Mulla, M.S., Darwazeh, H.A., Davidson, E.B., Dulmage, H.T., and Singer, S. Larvicidal activity and field of Bacillus sphaericus strains against mosquito larvae and their safety to non-target organisms. Mosquito News. 44:336-342. 1984.
60. Mclaughlin, R.E., Dulmage, H.T., Allis, R., Couch, T.L., Dame, D.A., Hall, I.M., Rose, R.I., and Versoi, P. L. U. S. standard bioassay for the potency assessment of Bacillus thuringiensis serotype H-14 against mosquito larvae. Bull. Entomol. Soc. A.M. 30:26-29. 1984.
61. Dulmage, H.T., Mclaughlin, R.E., Lacey, L.A., Couch, T.S., Allis, R. T., and Rose, R.I. A proposed U.S. Standard bioassay for the potency assessment of Bacillus thuringiensis subsp. israelensis H-14. Bull. Entomol. Soc. Am. 31:31-34. 1985.
62. Nakamura, L.K. and Dulmage, H.T. Bacillus thuringiensis cultures available from the U.S. Department of Agriculture, National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. 1988.
63. Dulmage, H.T. Production and use of Bacillus thuringiensis. Perspective from 1989. (Proceedings, 1st. national symposium on the biological control of pests and vectors, Rio de Janeiro, Brazil, Nov. 15 - 18, 1989).
64. Dulmage, H.T., Correa, J.A., Morales, G.M. Problems and progress in the development of microbial insect control agents. Israel Journal of Entomology. 1989.
65. Dulmage, H.T., Gallegos-Morales, G., and Correa, J.A.. Potential for improved formulations of Bacillus thuringiensis subsp. israelensis through standardization and fermentation development. In: Bacterial Control of Mosquitoes and Blackflies: Biochemistry, Genetics, and Applications of Bacillus thuringiensis subsp. israelensis and Bacillus sphaericus. H. de Barjac and D. Sutherland, eds. 1990.
66. Galan-Wong, L.; Rodriguez-Padilla, C.; Tamez-Guerra, R; Dulmage, H. T. GM-2, A new Subspecies of Bacillus thuringiensis (n. subsp. coahuilensis) with an unusual form of Parasporal Inclusion Body. F.C.B./U.A.N.L., Mexico, Vol. 4, 53-58. 1990.
67. Rodriguez-Padilla, C.; Galan-Wong, L.; de Barjac, H.; Roman-Calderon, E.; Tamez-Guerra, R.; Dulmage, H. Bacillus thuringiensis subspecies neoleonensis serotype H-24, a new subspecies which produces a triangular crystal. J. Invertebr. Pathol. 56., 280-282. 1990.
- The following are in advanced stages of editing, but have not been sent to a journal:
68. Dulmage, H.T. Activity ratios as tools in characterizing the delta-endotoxins of Bacillus thuringiensis. 1989.
69. Dulmage, H.T., Correa, J.A., and Gallegos-Morales, G. I. Interrelationships between C- and N- sources in 14 liter fermentors. 1989.



V. Special Invitations

- a. Invited to present the paper "Aspects of the Industrial Production of Microbial Insect Control Agents" at the International Colloquium on Insect Pathology and Microbial Control, Wageningen, The Netherlands, 1966.
- b. Invited to present the paper, "The Standardization of *B. thuringiensis*" at Symposium. IV International Colloquium on Insect Pathology, College Park, MD, 1970. (Chairman plus introductory remarks; Member of Summary Panels, 3 of 5 sessions.)
- c. Invited to present the paper "Assay and Standardization of Microbial Insecticides" at the Meeting of New York Academy of Sciences, New York City, NY, 1972.
- d. Invited to deliver lecture on the "Problems Associated with the Production of Pathogens" at the 14th International Congress of Entomology held in Canberra, Australia, 1972. (Unable to attend -- lack of funds).
- e. Invited to present the paper "What Can We Ultimately Expect of Different Technologies in the Production and Formulation of Microbial Insect Control Agents?" at the International Colloquium on Insect Pathology and Microbial Control, Oxford, England, 1973.
- f. Invited to present a paper at the Symposium on the Specificity and Development of Insect Viruses for Pest Control at the VII Annual Meeting of the Society for Invertebrate Pathology, Tempe, AZ, 1974. (Unable to attend. Paper read by chairman.)
- g. Invited to present the paper, "The *Bacillus thuringiensis*-d-Endotoxin, Its Past, Present, and Future" at IX Mexican National Congress of Entomology, Mexico City, 1974. (Unable to attend, paper presented by Dr. Mery.)
- h. Invited to present the paper "Production of d-Endotoxin of *Bacillus thuringiensis* in Artificial Media" at a symposium on microbial insecticides at the Intersectional Congress of the International Associations of Microbiological Societies, Tokyo, Japan. (Unable to attend - lack of funds).
- i. Invited to participate as Chairman of the Section on Biological Control to give the keynote presentation for that section of the VIII International Plant Protection Congress held in the USSR, 1975. (Unable to attend, lack of funds.)
- j. Invited to present keynote address at Bacterial Diseases Section at the Annual Meeting of the Society for Invertebrate Pathology, Corvallis, Oregon, 1975.
- k. Invited to present the paper, "Industrial and International Standardization of Microbial Pesticides -- I. *Bacillus thuringiensis*" at the Symposium on the Standardization and Safety of Microbial Pesticides, International Congress of Entomology, Washington, D.C., 1975.

59. Mullis, M.S., Darwazeh, H.A., Davidson, E.B., Dulmage, H.T., and Singer, S. Larvicidal activity and field of *Bacillus sphaericus* strains against mosquito larvae and their safety to non-target organisms. Mosquito News, 4:335-342, 1984.

60. McLaughlin, R.E., Dulmage, H.T., Allis, R., Couch, T.A., Bame, D.A., Hall, I.M., Rose, R.I., and Versol, R.L. U.S. standard bioassay for the potency assessment of *Bacillus thuringiensis* serotype H-14 against mosquito larvae. Bull. Entomol. Soc. Am. 70:26-29, 1984.

61. Dulmage, H.T., McLaughlin, R.E., Jacey, J.A., Couch, T.S., Allis, R., and Rose, R.I. A proposed U.S. standard bioassay for the potency assessment of *Bacillus thuringiensis* subsp. *israelensis*. H-14. Bull. Entomol. Soc. Am. 71:31-34, 1985.

62. Nakamura, K.K. and Dulmage, H.T. *Bacillus thuringiensis* cultures available from the U.S. Department of Agriculture, National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161, 1988.

63. Dulmage, H.T. Production and use of *Bacillus thuringiensis*. Perspective from 1982. (Proceedings, 1st. national symposium on the biological control of pests and vectors, Rio de Janeiro, Brazil, Nov. 15 - 18, 1983).

64. Dulmage, H.T., Correa, U.A., Morales, G.M. Problems and progress in the development of microbial insect control agents. Israel Journal of Entomology, 1989.

65. Dulmage, H.T., Gallegos-Morales, G., and Correa, U.A. Potential for improved formulations of *Bacillus thuringiensis* subsp. *israelensis* through standardization and fermentation development. In: Bacterial Control of Mosquitoes and Blackflies: Biochemistry, Genetics, and Applications of *Bacillus thuringiensis* subsp. *israelensis* and *Bacillus sphaericus*. H. de Barjac and D. Sutherland, eds. 1990.

66. Galan-Wong, J., Rodriguez-Padilla, C., Tamez-Guerra, R., Dulmage, H.T. GM-2, A new subspecies of *Bacillus thuringiensis* (n. subsp. *coahuilensis* with an unusual form of parasporal inclusion body. P.C.B.U.A.N.L., Mexico, Vol. 4, 23-28, 1990.

67. Rodriguez-Padilla, C., Galan-Wong, J., de Barjac, H., Roman-Galgon, E., Tamez-Guerra, R., Dulmage, H. *Bacillus thuringiensis* subsp. *neoleonensis* serotype H-24, a new subspecies which produces a triangular crystal. J. Invertebr. Pathol. 56, 380-382, 1990.

The following are in advanced stages of editing, but have not been sent to a journal:

68. Dulmage, H.T. Activity ratios as tools in characterizing the delta-endotoxins of *Bacillus thuringiensis*. 1989.

69. Dulmage, H.T., Correa, U.A., and Gallegos-Morales, G. I. Interrelationships between C- and N- sources in 14 liter fermentors. 1989.



- v. Invited to present the paper, "Production of Bacteria for Biological Control of Insects" at the Beltsville Agricultural Research Center
- 1. Invited to present the Paper "Industrial and International Standardization of Microbial Pesticides -- II. Insect Viruses" at the Symposium on the Standardization and Safety of Microbial Pesticides, XV International Congress of Entomology, Washington, D.C. 1976.
- m. Invited to present the paper, "The Production of d-Endotoxin of Bacillus thuringiensis" at the Symposium on the Production of Microbial Insect Control Agents, XV International Congress of Entomology, Washington, D.C. 1976.
- n. Invited to participate as Symposium Speaker in the Symposium on the Production on Ecology of Microbiological Insecticides held in conjunction with the International Symposium on Microbial Ecology, University of Otago, Dunedin, New Zealand, 1977.
- o. Invited to present the paper "Genetic Manipulation of Pathogens: Selections of Different Strains" at the Rockefeller sponsored Bellagio Conference on Genetics in Relation to Insect Management, Bellagio, Italy, 1978.
- p. Asked to organize the 2nd International Workshop on Bacillus thuringiensis and to present 2 papers: "The International Cooperative Program and Spectrum of Activity Ratios" and "Production of Bacillus thuringiensis-d-endotoxin in Submerged Culture", Darmstadt, Germany, 1978.
- q. Invited to present a paper with C. C. Beegle: "Relationships between Bioassay-Established Isolates with Different Spectra of Activities" at the International Colloquium on Invertebrate Pathology and Xth Annual Meeting of the Society for Invertebrate Pathology, Prague, Czechoslovakia, 1978.
- r. Asked to organize and chair a meeting on Standardization and Industrial Development of Microbial Control Agents, sponsored by the World Health Organization, New Orleans, LA, 1979.
- s. Invited to present the paper "Recent Advances in Developing Entomopathogens for Insect Control -- Bacteria" at the North Central Branch meeting, Entomological Society of America, Lincoln, Nebraska, 1980.
- t. Invited to present a seminar organized by the Faculty of Biological Sciences, the Center of Biological Investigations, and the Graduate School of the University of Nuevo Leon, Monterrey, Mexico, 1980.
- u. Invited to present "Current Technological and Conceptual Impediments to Widespread Use of Microbial Control Agents: In Vitro Production" at the Workshop on Insect Pest Management with Microbial Agents: Recent Achievements, Deficiencies, and Innovations, Boyce Thompson Institute for Plant Research, Ithaca, N.Y., 1980.
- hh. Invited to present two papers, "Bioassay Methods for Insect Pathogens" and "Microbial Agents: Biological Properties and Mode of Action. I. Bacteria" at the Workshop on Microbial Control of Insects, Monterrey Tech.

- v. Special Invitations
- a. Invited to present the paper "Aspects of the Industrial Production of Microbial Insect Control Agents" at the International Colloquium on Insect Pathology and Microbial Control, Wageningen, The Netherlands, 1966.
- b. Invited to present the paper, "The Standardization of B. thuringiensis" at Symposium. IV International Colloquium on Insect Pathology, College Park, MD, 1970. (Chairman plus introductory remarks; Member of Summary Panels, 3 of 5 sessions.)
- c. Invited to present the paper "Assay and Standardization of Microbial Insecticides" at the Meeting of New York Academy of Sciences, New York City, NY, 1972.
- d. Invited to deliver lecture on the "Problems Associated with the Production of Pathogens" at the 14th International Congress of Entomology held in Canberra, Australia, 1972. (Unable to attend -- lack of funds.)
- e. Invited to present the paper "What Can We Ultimately Expect of Different Technologies in the Production and Formulation of Microbial Insect Control Agents?" at the International Colloquium on Insect Pathology and Microbial Control, Oxford, England, 1973.
- f. Invited to present a paper at the Symposium on the Specificity and Development of Insect Viruses for Pest Control at the VII Annual Meeting of the Society for Invertebrate Pathology, Tempe, AZ, 1974. (Unable to attend. Paper read by Chairman.)
- g. Invited to present the paper, "The Bacillus thuringiensis-d-Endotoxin, Its Past, Present, and Future" at IX Mexican National Congress of Entomology, Mexico City, 1974. (Unable to attend, paper presented by Dr. Mery.)
- h. Invited to present the paper "Production of d-Endotoxin of Bacillus thuringiensis in Artificial Media" at a symposium on microbial insecticides at the International Congress of the International Associations of Microbiological Societies, Tokyo, Japan. (Unable to attend -- lack of funds.)
- i. Invited to participate as Chairman of the Section on Biological Control to give the keynote presentation for that section of the VIII International Plant Protection Congress held in the USSR, 1975. (Unable to attend, lack of funds.)
- j. Invited to present keynote address at Bacterial Diseases Section at the Annual Meeting of the Society for Invertebrate Pathology, Corvallis, Oregon, 1975.
- k. Invited to present the paper, "Industrial and International Standardization of Microbial Pesticides -- I. Bacillus thuringiensis" at the Symposium on the Standardization and Safety of Microbial Pesticides, International Congress of Entomology, Washington, D.C., 1976.