

REFERENCES

- Abd El-Hafez; Alia; Metwally, A. G. and Saleh, M. R. A. (1982):** Rearing pink bollworm, *Pectinophora gossypiella* (Saund.) on kidney bean diet in Egypt (Lepidoptera : Gelechiidae). Res. Bull., Fac. Agric., Zagazig Univ., April, (567) 10 pp.
- A.O.A.C. (1995):** Official method of analysis association of official analytical chemistry. 12th Ed., USA.
- Bennett, J. W.; Lee, L. S.; Shoss, S. M. and Boundreaux, G. H. (1980):** Identification of averantin as an aflatoxin B1 precursor placement in the biosynthesis path. Appl. Environ. Microbil. April, 835-839.
- Bidochka, M.J. and Khachatourians, G.G. (1994):** Protein hydrolysis in *grass hopper* cuticle by entomopathogenic fungal extracellular proteases. J. Invertebr. Pathol. 63: 1, 7-13.
- Bidochka, M. J.; Leger, R.J. and Roberts, D.W. (1997):** Induction of novel proteins in *Manduca sexta* & *Blaberus giganteus* as a response to fungal challenge. J. Invertebr. Pathol. 70: 3, 184-189.
- Bressac, B; Kew, M; Wands, J. and Oztrrak, M. (1991):** Selective G to T mutations of P35 gene in hepatocellular carcinoma from Southern Africa Nature, 350: 429-430.
- Cerenius, L.; Thornqvist, P.O.; Vey, A.; Johansson, M.W. and Soderhall, K. (1990):** The effect of the fungal toxin destruxin E on isolated *Crayfish haemocytes*. J. Insect. Physiol. 36 : 10, 785-789.

- Charnley,A.K. (1990):** Secondary metabolites, toxins and entomopathogenic fungi: an evolutionary perspective. Invertebratopathol and microbial control. Adelaide, Australia.303-307.
- Cheng,Z.H. and Xing,H.P. (1984):** Changes of haemolymph proteins in *Ostrinia furnacali* infected with spores or toxins of *Beauveria bassiana*. Acta,Entomol.Sinica. 27:1, 23-27.
- Christensen, C. M. (1957):** Deterioration of stored grains by fungi. Botanical Rev., 23: 108-134.
- Coallier,A.J. and Idzizk, E. S. (1985):** Interaction between *Streptococcus lactis* and *Asperigillus flavus* on production of aflatoxin. J. Appl. Environ. Microbial, 163-167.
- Corrado, A. P.; Dinis, C. R.; Russell, F. E. and Uraguchi, K. (1971):** Pharmacology and toxicology of naturally occurring toxins. 11; 217-246, Pergamon press. Oxford, New York, USA.
- Daniela,A.; Strasser,H.and Keller,S. (2000):** Considerations on Toxic metabolites produced by *B. brongniartti*. Integrated control of soil pest subgroup "Melolontha" Sion, Switzer.Bull,OLIB, SROP.23:8, 99-105.
- Davidson,E.W.;Patron,R.; Vey,A.; Frutos,R; Leger,R.; Lacey,L.A.and Hendrix,D.I.(1996):** Effect of destruxins from *Metarhizium anisopliae*, ivermectin and *B. thuringiensis* delta-endotoxins on adult silver leaf whitefly, *Bemisia argintifolii*. Proceeding Beltwide Cotton Conferences, Nashville, TN, USA, 739-740.

Davis, N. D.; Diener, U.L. and Eldridge, D. W. (1966): Production of aflatoxins B₁ and G₁ by *A. flavus* in asemisynthesis medium. Appl. Microbial., 14: 378-380.

Domsch, K. H.; Gams, W. and Erson. T. H. (1980): Compendium of soil fungal. Academic Press, London, New York, Toronto, Sydney, San Francisco.

Emmerich, R.; Giez, I.; Lane, O. L. and Proksch, P. (1993): Toxicity and antifeedant activity of lichen compounds against the polyphagous hebrbivorous insect *Spodoptera littoralis*. Phytochemistry 33 (6): 1389-1394.

Englard, S. and Seifter, S. (1992): Precipitation techniques in protein purification. Meth. Enzymol. 182, 285.

Farias, A.X.; De Robbs, C.F.; Bittencort, A.M.; Andersen, P.H.; Conceia, T.B.S.; and De, Farias, A.X. (2000): Endogenous *Aspergillus spp.* Contamination of post harvest corn in Paraná state. Pesquisa- Agropecuaria-Brasileria, 35: 3, 617-621.

Ferron, P., (1975): Les champignons entomopathogenes: Evolution des recherches au cours des dix dernieres annees. Bul. Sci. Biol. Organ. Int. Lutte boil.; WPRS Bul. 1975/3.

Finney, D. J. (1971): Probit-analysis, 3rd Ed., Cambridge Univ. Press, London.

Gallardo, F. ;and Boethel, D. J.; Fuxa, J. R.; and Richter, A.; (1990): Susceptibility of *Heliothis zea* (Boddie) larvae to *Nomuraea rileyi* (Far low) Samson: effects of alphetomatine at the third trophic level. J. Chemic. Ecol. 16 (6): 1751-1759.

Gaur, P. K.; El-Nakib. O. and Chu, F. S. (1980): Comparison of antibody production against aflatoxin B1 in goats and rabbits., 678-6890.

Gillespie,A.T. and Claydon,N. (1989): The use of entomogenous fungi for pest control and the role of toxins in pathogenesis. *Pesticide.Sci.* 27:2, 203-215.

Gindin,G.; Barash,I.; Raccah,B.; Singer,S.; Ben,Ze,ev-I.S.; Klein,M.; Jenser, G.and Adam,L. (1996): The potential of some entomopathogenic fungi as biocontrol agents against the onion thrips, *Thrips tabaci* and the western flower thrips, *Frankliniella occidentalis*. *Folia-Entomol.Hungarica*, 62: 37-42.

Graystone,J.L.; Charnley,A.K.; Albajes,R. and Carnero,A. (1997): Disease development strategies of the insect pathogenic fungi *Verticillium lecanii* and *Metarhizium anisopliae*. Integrated control in protected crops. *Bulletin-OILB-SROP.*, 20 : 4, 263-267.

Gupta,S.; Roberts,D.W. and Renwick,J.A.A. (1989): Insecticidal cyclodepsipeptides from *Metarhizium anisopliae*. *Perkin-Transactions-1*, 12, 2347-2357.

Gupta,S.; Montllor,C. and Hwang-Y.S. (1995): Isolation of novel beauvericin analogues from the fungus *B. bassiana*. *J. Natural.Products.* 58:5, 733-738.

Hajek, A. E. and Leger, R. J. (1994): Interactions between Fungal pathogens and insect hosts. *Ann.Rev.Entomol.* 39, 293-322.

Harwing, J.; Scott, P. M.; Stoltz, D. K. and Blanch F.B. J. (1979): Toxins of molds from decaying tomato fruits. *Appl. and Environmental August*, 241-274.

- Hernandez, C.P. and Santiago, A. C. (1997):** Entomopathogenic fungi associated with natural populations of the Moroccan locust, *Dociostaurus maroccanus* (Thunberg) (Orthoptera : Gomphoceriane) and other Acridiidea in Spain. *Biocontrol Sci and Technol.* 7:3, 357-363.
- Hesseltine, C. W.; Shotwell, O. L.; Smith, M.; Ellis, J. J.; Vandegrift, E. and Shannon, G. (1970):** Production of various aflatoxins by strains of the *Aspergillus* series. In proceeding of the US. Japanese conference on toxic microorganisms, M. Herzberg, ed. US Department of the Interior Washington, DC, USA, PP 203-210.
- Hsu, I.C, Metcalf, R.A.; Sun, T.; Walesh, J.A.; Wang, N.J. and Harris, CC (1991):** Mutational hot spot in the P53 gene in human Hapatocellular carcinoma. *Nature*, 350: 427-428.
- Hung, S. and Boucias, D. G. (1996):** Phenol oxidase activity in hemolymph of naïve and *B. bassiana*-infected *Spodoptera exigua* larvae. *J. Inverteber. Pathol.*, 67 (1): 35-40.
- Ismail, M. A. and Abdel-Sater, M. A. (1993):** Fungi associated with the Egyptian cotton leaf worm, *Spodoptera littoralis* Boisduval. *Mycopathologia*, 124 (2): 79-86.
- Jawetz, E.; Melnick, J.; Adelberg, E.; Brooks, G.; Butel, J. and Ornston, L. (1995):** Medical mycology "mycotoxins" PP 330. In: *Medical Microbiology* 20th ed. Norwalk, connect San Mateo, California.
- Kamp, A.M. and Bidochka M.J. (2002):** Protein analysis in a pleomorphically deteriorated strain of the insect-pathogenic fungus *Manisopliae*. *Canadian. J. Microbiol*, 48:787-792.

- Kemmelmeyer, C. (1989):** Gradient high performance liquid chromatography using alkyl phenone retentional indices of insecticidal extracts of *Pencillium* strain on *Spodoptera littoralis*. J. Chromat, 483: 153-168.
- Kershaw,M.J.; Moorhouse,E.R.; Bateman,R.; Reynolds, S.E.and Charnley,A.K. (1999):** The role of destruxins in the pathogenicity of *Metarhizium anisopliae* for 3 species of insect. J.Invertebr.-Pathol, 74: 3, 213-223.
- Khachatourians, G.G.; Valencia,E.P.; Miranpuri,G.S.; Koul,O. (ed.);and Dhaliwal-G.S. (2002):** *Beauveria bassiana* and other Entomopathogenic fungi in the management of insect pest. Microbial-Biopesticides, 239-275.
- Krasnoff,S.B.; Gibson,D.M.; Belofsky,G.N.; Gloer,K.B.and Gloer,J.B. (1996):** New destruxins from the entomopathogenic fungus *Aschersonia* sp. J.Natuiral Products, 59: 5, 485-489.
- Laemmli, U. K. (1970):** Cleavage of structural proteins during The assembly of the head of bacteriophage T4.Nature, 227:680-685.
- Maniania, N. K. and Fargues, J. (1984):** Specificity of entomo pathogenic hyphomycetes to Lepidoptera noctuid larvae. Entomophaga, 29 (4): 451-464.
- Maniania,N.K.;(1992):**Pathogenicity of entomogenous fungi to larvae of the stem borers,Chilo partellus Swinhoe and Busseola Fusca Fuller. Insect Sci.and its Applications (ICIPE).13:691-696.
- Maurice, D. V.; Bodine, A. B. and Behrer, N. J. (1983):** Metabolic effects of low aflatoxin B1 levels on broiler chicks. J. Appl. and Environ. Microbial, Mar., PP 980-984.

- Mazet, I.; Hung S.Y. and Boucias.(1994):**Detection of toxic metabolites in the haemolymph of *Beauveria bassiana* infected *Spodoptera exigua* larvae. *Experientia* 50,142-147.
- Metcalf, R. L. and Luckman, W. H. (1994):** Introduction to Insect pest management, 3rd ed. Wiley, Ed., New York.
- Mier, N.; Canete, S.; Kalaebe, A.; Chavant, L. and Fournier, D. (1996):** Insecticidal properties of mushroom and toad stool carpophores. *Chytochemistry*, 41 (5): 1293-1299.
- Milanez, T.V.; Schoenlein,C.I.H. and Okino,L.K. (2002):** Evaluation of Brazillian terrestrial *Aspergillus* strains for mycotoxins production. *Revista-do instiuto-adolfo-luts.*, 61:1, 7-11.
- Miranpuri, G.S. and Khachatourians, G.G. (1994):** Pathogenicity of *Beauveria bassiana* (Bals.) Vuill and *Verticillium lecanii* (Zimm.) toward blister beetle, *Lytta nuttali* (cd., melodiae). *Journal-of-Applied-Entomology*, 118:1, 103-110.
- Papierok,B.; Brey,P.T.; Pavis,C. and Kermarrec,A. (1991):** A discussion of Entomopathogenic fungi and their potential use of the control of insect vectors. *Rencontres caraibes enlutte biologique. Caribbean Meeting on biological control. Guadeloupe (Antilles francaises)*, 257-270.
- Paterson, R. R. M.; Simmonds, M. S.J., and Blaney, W. M. (1987):** Mycopesticidal effects of characterized extracts of *Pencillium* isolates purified secondary metabolites(including mycotoxins) on *Drosphila melanogester* and *Spodoptera littoralis*. *J. Inverteb. Pathol.*, 50:2, 124-133.
- Pestka, J.J.; Gaur, P. K. and Chu, F. S. (1980):** Quantitation of aflatoxin B1 and aflatoxin B1 antibody by an enzyme-

linked immunosorbent microassay. J. Appl. and Environ. Microbiol., Dec., Pp. 1027-1031.

Raghu, A.; Eedie, T. and Liewellyn, G. C. (1978): Evaluation of potential for aflatoxin occurrence on celery, cauliflower, lettuce, and taro inoculated with *Aspergillus flavus*, and *Aspergillus parasiticus*. J. AOAC, 16 (4): 998-1001.

Rashed,A.M. and Aly,S.H. (1997): Susceptibility of eggs and larvae of the *Pectinophora gossypiella* (Lepidoptera-Gelechiidae) to the *Beauveria bassiana*. Analele-Institutului-de-Cercetari-Pentru-Cereale-Protectia-Plantelor.28:2,193-201.

Samson, R. A. (ed.) (1974): *Paecilomyces* and some altd hyphomycetes. Centraalbureau voor Schimmelcultures, Baarn, Nether lands.

Samuels,R.I.; Charnely,A.K.and Reynolds,S.E. (1988): The role of destruxins in the pathogenicity of 3 strains of *Metarhizium anisopliae* for the tobacco hornworm *Manduca sexta*. Mycopathologica, 104: 1, 51-58.

Samuels,R.I. (1998): A sensitive bioassay for destruxins, cyclodepsipeptides from the culture filtrates of the entomopathogenic fungus *M. anisopliae*. Anais-da-Sociedade-Entomologica-do-Brasil, 27:2, 229-235.

Seo, J.; Jin, B.;Shin, S.; Park, H.; Lee, B.; Chang, K.; Kang,Seo, J.B.; Jin, B.R.; Shin, S.C.; Park, H.Y.; Lee, B.Y.; Chang, K.L.and Kang, S.K.(1995): Isolation of entomopathogenic fungi for infection to the pine gall midges, *Thecodiplosis japonensis* from the forest soil in Korea. J.Applied.Entomol, 34:4, 368-372.

- Sharma, A.; Padwal, Desai, S. R. and Nadkarni, G. B. (1985):** Possible implications of reciprocity between ethylene and aflatoxin bioagenesis in *Aspergillus flavus* and *Aspergillus parasiticus*. J. Appl. And Environ. Microbiol., Jan. PP. 79-82.
- Sharma, S.; Agrawal, G.P.; Tajak, RC (1994):** Pathophysiological alterations caused in *Heliothis armigera* by toxic metabolites of *Beauveria bassiana* (Bals) Vuill. Indian J. Exp. Biol, 32: 3, 168-171.
- Shih, C.N. and Marth, E. H. (1973):** Release of aflatoxin from the mycelium of *Aspergillus parasiticus* into liquid media. Z. Lebensm. Unters. Forsh., 152-336-339.
- Shorey, H.H. and Hale R.L. (1965):** Mass rearing of the larvae of nine noctuidy species on asimple artificial medium. J.Econ. Entomol. 58:522-524.
- Smith, P. (1993):** Control of *Bemisia tabaci* and the potential of *Paecilomyces fumosoroseus* as abiopesticide. Biocontrol News and Information, 14 (4): 71-78.
- Thom, C; and Raper, K.B.(1945):** A manual of *Aspergillus* Willamas and Wilkins Co. Batimore, Mol.
- Wan, N. C. and Hsiehl, D. P. H. (1980):** Enzymatic formation of the bisfuan structure in aflatoxin biosynthesis. J. Appl. and Eviron Microbial, PP. 109-112.
- Watson, T.F. and Kelly-Johnson, S.(1995):** A bioassay to assess *Pectinophora gossypiella* (Saunders), Susceptibility to B.T.toxins. In Proceedings of Beltwide cotton conference. National cotton council of America. Memphis. 878-879.
- Westwood, G.S; Huang, S. and Keyhani, N.O. (2005):** Allergens of the entomopathogenic fungus *Beauveria bassiana*. Clinical and Molecular Allergy., 3:1476-7961.

- Willcocks, (1916):** The insect and related pests injurious to the cotton plant. Part1. The pink bollworm (Sultanica).Agric.Soc.339pp.Cairo.
- Wogan, G. N. and Newbrene, P. M. (1967):** Dose response characteristic of aflatoxin B1 carcinogenesis in the rat cancer. Res., 27: 2370-2376.
- Yeo,H.; Pell,J.K.; Alderson,P.G.; Clark,S.J. and Pye,B.J. (2003):** Laboratory evaluation of temperature effects on the germination and growth of Entomopathogenic fungi and on their pathogenicity to two aphid species. Pests-Management-Science, 59:2, 156-165.
- Ying, S.H. and Feng, M.G.(2004):**Relationship between thermotolerance and hydrophobin- like proteins in aerial conidia of *Beauveria bassiana* and *Paecilomyces farinosus* as fungal biocontrol agents. J. Applied Microbiol, 97:323-331.