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Leptinotarsa decemlineata

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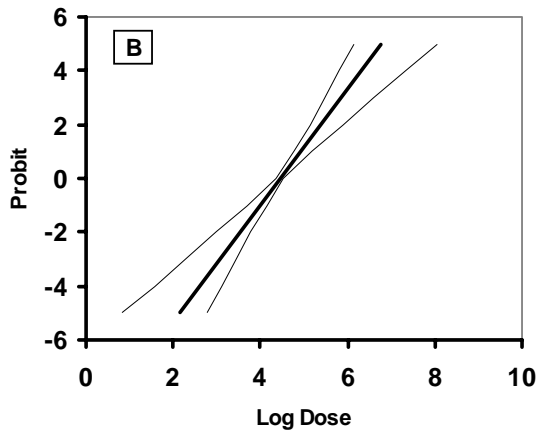
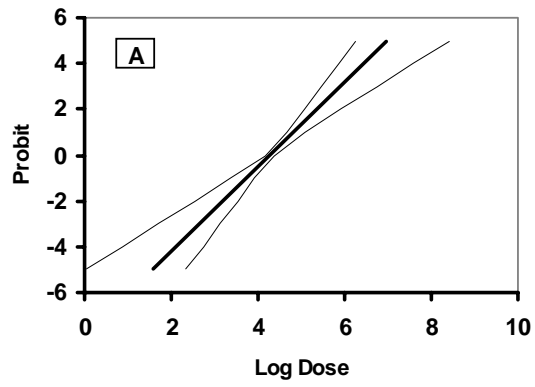
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1. *Plutella xylostella* L. (Lepidoptera: Plutellidae)

2. *Myzus persicae* (Sulzer) (Homoptera: Aphididae)



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1. Polo-PC 2002
2. Priprobit

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Choristoneura occidentalis

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J.L. Robertson

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REFERENCES

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Leptinotarsa decemlineata (Col. Chrysomelidae)

8. Boiteau, G. 1988. Control of the Colorado potato beetle, *Leptinotarsa decemlineata* (Say): learning from the Soviet experience. Bull. Entomol. Soc. Ca. 20(1): 9-14

9. Hare, J. D. 1990. Ecology and management of the Colorado potato beetle. *Annu. Rev. Entomol.* 35: 81-100
10. Haverty, M. I. & J. L. Robertson 1982. Laboratory bioassay for selecting candidate insecticides and application rates for field tests on the western spruce budworm. *J. Econ. Entomol.* 75(2): 179-182
11. Johnston, R. I. & I. F. Sandvol 1986. Susceptibility of Idaho populations of Colorado potato beetle to four classes of insecticides. *Am. Potato J.* 63(2): 81-86
12. LeOra Software. 1987. POLO-PC: A users guide to Probit or Logit analysis. LeOra Software, Berkeley, California.
13. MSU Resistance Database. 2002. The database of arthropods resistance to pesticides. <http://www.pesticideresistance.org/DB/>
14. Noronha, C., & M. Goettel. 2002. Insecticide resistance in populations of the Colorado potato beetle, *Leptinotarsa decemlineata* spreads westward in Canada. *Resistance. Pest Management. Newsletter.* 12: (1): 26-30
15. Noronha, C., G. M. Duck, & J. M. Chinn. 2001. Difference susceptibility by *Leptinotarsa decemlineata* (Col. Chrysomelidae) population from western Canada. *Phytoprotection* 82(3) 113-121
16. Robertson, J. L. & H. K. Preisler. 1991. *Pesticide Bioassays with Arthropods.* CRC Press Inc., Boca Raton, Florida: 127 pp.
17. Robertson, J. L., K. C. Smith, N. E. Savin, & R. J. Lavigne 1984. Effects of dose selection and sample size on the precision of lethal dose estimates in dose-mortality regression. *J. Econ. Entomol.* 77 (4): 833-837
18. Roush, R. T. & W. M. Tingey. 1992. Evolution and management of resistance in the Colorado potato beetle, *Leptinotarsa decemlineata*. In Denhold, I., A. L. Devonshire, and D. W. Hollomon (eds) *Resistance 91: Achievements and developments in combating pesticide resistance.* Proceeding of the SCI symposium held at Rothamsted Experimental Station, Harpenden, UK
19. Sanchez, D. M. 2002. Resistance and metabolism of imidaclopride in Colorado potato beetle, *Leptinotarsa decemlineata* Say (Col. Chrysomelidae). Ph.D Dissertation. Mich. Sta. Univ. 136 pp
20. Tisler, A. M., & G. W. Zehnder. 1990. Insecticides resistance in the Colorado potato beetle (Col., Chrysomelidae) on the eastern shore of Virginia. *J. Econ. Entomol.* 83(3): 666-671
21. Vasquez, B. L. 1995. University of Florida Book of Insect Records, Chapter 15, Resistant to Most Insecticides. <http://ufbir.ifas.ufl.edu/chap15>
22. Wegorek, P., M. Pawinska, E. Przybysz & R. Dutton 2002. Insecticide resistance management strategy for Colorado potato beetle (*Leptinotarsa decemlineata* Say) in Poland. *Resistance. Pest Management. Newsletter.* 11(2): 22-30
23. Williams, C. B. 1973. Field tests of four insecticides against the Douglas-fir tussock moth in Oregon. Pp. 77-83. *Perm. Assoc. Comm. Proc., West. For. Conservation Assoc., Portland, Oreg.* 182 pp.
24. Zhao, J., B. A. Bishop, & E. J. Grafius 2000. Inheritance and synergism of resistance to imidacloprid in the Colorado potato beetle (Coleoptera: Chrysomelidae) *J. Econ. Entomol.* 93 (5): 1508-1514