

Organic Integrated Pest Management for Some Agricultural Pests

Adapted from a series of workshops sponsored by
**OFRF (Organic Farming Research Foundation) and
NCAT (National Center for Appropriate Technology)**

by Ann Baier, Rex Dufour, Martín Guereña, Karen Van Epen

Many thanks to the following institutions and individuals
who amiably gave permission to use their photographs

Page 1 — 1: USDA Forest Service, Soil Ecology Society. 2, 3, 6: Rex Dufour, NCAT.
4: Martín Guereña, NCAT. 5: Kasey Dufour. 7: Steve Diver, NCAT.
Page 2 — 1, 3, 4, 5, 6, 7, 8: Rex Dufour, NCAT.
2: <<http://sunsite.tus.ac.jp/multimed/pics/animals/bat.jpg>> 9: www.tu.ac.th/usr/bird/pic17.htm.
10: The Barn Owl Centre of Gloucester, www.barnowl.co.uk. 11: Martín Guereña, NCAT.
Page 3 — 1, 2, 4, 5: UC IPM (University of California Statewide Integrated Pest Management Program,
see below) 3, 6: OSU Potato (Oregon State University *IPM on Potato*, see below)
7: Kasey Dufour. 8, 16: Rex Dufour, NCAT. 9, 10, 11, 13, 14, 15: OSU Mint (Oregon State University
IPM on Peppermint, see below) 12: UFL (University of Florida, see below)
Page 4 — 1, 2, 3, 4, 5, 7: OSU Mint. 6, 8, 9: UC IPM. 10, 11: Rex Dufour.
Page 5 — 1: Unattributed. 2: TAMU (Texas A & M University, see below), (W. Sterling).
3: Mid-Atlantic Orchard Monitoring Guide, copyright 1995 (Photographer: J.P. McCaffrey).
4: OSU Mint. 5: Mark S. Hoddle, Dept. of Entomology, University of California, Riverside.
6, 7, 8: UC IPM. 9: TAMU (W. Sterling). 10, 11, 12, 13, 14: © Department of Entomology, University
of Nebraska-Lincoln (Cangrejo spider: David Keith. Other spiders: Jim Kalisch.)
Page 6 — 1, 3: Rex Dufour, NCAT. 4: TAMU (Drees). 6: University of Georgia.
5, 9: Cornell University Vegetable MD Online (see below) 2, 7, 8, 9: Unattributed.
Page 7 — 1, 3, 5, 7, 8, 9, 10, 13, 14, 17, 20, 21: UC IPM. 2: North Dakota State University.
4, 12, 20: TAMU (W. Sterling). 6: OSU IPM Mint. 16: Ohio State University, www.ag.ohio-state.edu/%7Ebygl/images/enlt/enlt-52.jpeg 18: www.defenders.co.uk/traps.htm.
19: <<http://sunsite.tus.ac.jp/multimed/pics/animals/>>
Page 8 — 1, 5, 15: University of Vermont. 2: UFL (J. Castner). 3, 6, 7, 9, 14, 16, 18, 19, 22: UC IPM.
12: UC IPM (R.F. Norris). 13: IPM of Alaska (Max Badgley, Entomological Photography Ltd).
17: discoverlife.com (John Pickering). 21: UFL (J. Lotz). 23: UC IPM (Earl Oatman).
Page 9 — 1, 2, 3, 7: OSU IPM Mint. 5, 6, 8: Rex Dufour. 9, 10: Unattributed.
Page 10 — 1: www.pv.fagro.edu.uy/fitopato/cursos/fitopato/practicas/3/botrytis03.jpg.
2: UC IPM. 3: Cornell Vegetable MD Online. 5: Cornell University (M.T. McGrath).
6, 7: Cornell University (T.A. Zitter). 8: UC IPM. 9: Cornell University (R. Provvidenti). 10: UC IPM.
11: Sugarbeet cyst nematode juvenile: www.mactode.com (Micael McClure). 12: Lesion nematodes
penetrating a root: www.mactode.com (Ulrich Zunke).
Page 11 — 1, 7: Unattributed. 3: N. Carolina Coop Extension, www.ces.ncsu.edu.
2, 4: Martín Guereña, NCAT. 5: www.wcu.mis.coventry.ac.uk. 6: TAMU (Harold Kaufman).
Page 12 — 1, 4, 6: UC IPM. 2: Ohio State University, <vegnet.osu.edu/reports/pumwk2c.htm>
3: www.bejo.com/images/sclerotinia%20rot.jpg.
5: <http://plant-protection.massey.ac.nz/171_284/cs_notes/learnpst/module3/sclero.htm>
7: University of Arizona. 8: Cornell Vegetable MD Online.
Page 13 — 1: www.pv.fagro.edu.uy/fitopato/cursos/fitopato/practicas/3/botrytis03.jpg.
2: UC IPM. 3: Drawing by Martín Guereña, NCAT. 4: www.gartenratgeber.de.
5, 6, 7: www.redepapa.org.
Page 14 — 1: UC IPM. 2, 6: Rex Dufour, NCAT. 3: Mount Allison University, New Brunswick,
Canada (Robert Thompson). 4: UC IPM. 5, 10: Unattributed. 7, 9: University of Washington
Restoration Ecology Network. 8: University of Minnesota. 11: University of California Sustainable
Agriculture Education Program, www.sarep.ucdavis.edu.

Page 15 — 1, 2, 3, 4, 5: Unattributed. 6: Sustainable Ag Farm of Minnesota. 7: UC IPM.
9: Flame Weeders, Glenville, WV. 10, 11: Larry Deleers, Saukville Tractor Corporation.
Page 16 — 1, 2: Bainer, R., R.A. Kepner and E.L. Barger, 1955, *Principles of Farm Machinery*, p.261 &
265, John Wiley & Son, Inc., N.Y. 3, 6: PAV Lelystad, The Netherlands. 4, 8: Unattributed.
5: www.tuff-bilt.com. 7: Roger Samson, REAP-Canada. 10, 11, 12, 13: USDA.
Page 17 — 1, 2, 5: UC IPM. 3: Illustration from Salmon, T. P., and R. E. Lickliter. 1984. *Wildlife Pest
Control around Gardens and Homes*. Univ. of Calif. Agric. & Natural Resources Publ. 21385.
4, 7: Univ. of Florida Inst. of Food & Ag. Science, *Southeast Pocket Gopher* by W.H. Kern, Jr.,
<<http://edis.ifas.ufl.edu/uw081>> 6: Drawing by Martín Guereña, NCAT.
Page 18 — 1, 2, 3, 5, 6, 9: The Barn Owl Centre of Gloucester, www.barnowl.co.uk
4, 7, 8: Irene Lindsey, <http://kaweahoaks.com/html/barn_owl_house.html>
Page 19 — 1, 2, 3, 4, 5: UC IPM. 6: www.uwecschnitt.de:808/170.htm. 7: Unattributed.
Page 20 — 1, 2: UC IPM. 3: Rex Dufour, NCAT. 4: www.wildbirdmart.com.
Page 21 — 1: Unattributed. 2, 7: UC IPM. 3: R.Z. Brown, US Department of Health, Education and
Welfare's Communicable Disease Center. 4, 5: From Bjornson, B.F., and C.V. Wright, 1960, *Control of
Domestic Rats & Mice*, Center for Disease Control, USDHEW, Public Health Service (Publ. 563).
6: From Storer, T.I., 1960, *How to Control Rats & Mice*, Calif. Ag Experiment Station Extension Service
(Leaflet 127). 8: USDA Animal & Plant Health Inspection Service, WS.

- **Cornell University Vegetable MD** — www.vegetablemdonline.ppath.cornell.edu
- **OSU Mint** — *Integrated Pest Management on Peppermint- IPMP3.0* [online], by Berry, R.E., and L.B. Cooper (2000), Publication No. IPPC E.01-01-1, <<http://mint.ipcc.orst.edu>>
- **OSU Potato** — *Identification and Management of Major Pest & Beneficial Insects in Potato* [online], by Berry, R.E., G.L. Reed, and L.B. Cooper (2000), Publication No. IPPC E.04-00-1, <<http://ippe2.orst.edu/potato>>
Both OSU Mint and OSU Potato from Oregon State University, Department of Entomology and Integrated Plant Protection Center, Corvallis, OR. All OSU photos here from the Ken Gray Slide Collection, Extension Entomology, Oregon State University, Corvallis, OR.
- **TAMU** — Texas A & M University: Department of Plant Pathology, <<http://plantpathology.tamu.edu>> and Department of Entomology, <<http://entowww.tamu.edu>>.
- **UC IPM** — University of California Statewide Integrated Pest Management Program, © UC Regents. All UC IPM photos are by Jack Kelly Clark, unless otherwise noted. Web site: <<http://axp.ipm.ucdavis.edu>>
- **UFL** — University of Florida Institute of Food and Agricultural Science's Featured Creatures, <<http://creatures.ifas.ufl.edu>>

© 2004 National Center for Appropriate Technology



Offices in Arkansas, California, and Montana
www.ncat.org

For more information, call ATTRA
(The National Sustainable Agriculture Information Service)
at 1 800 346-9140. Or visit www.attra.ncat.org

Para más información en Español,
Llámenos al proyecto ATTRA
(El Centro Nacional de Información de la Agricultura Sostenible)
al 1 800 411-3222. La llamada es gratis.
O visita nuestro sitio Web — www.attra.ncat.org/espanol/