

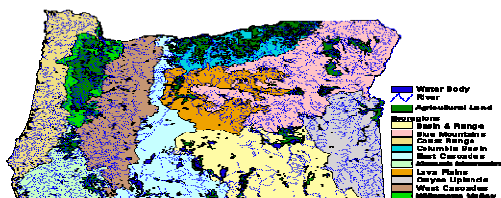
Biologically-based IPM in Oregon



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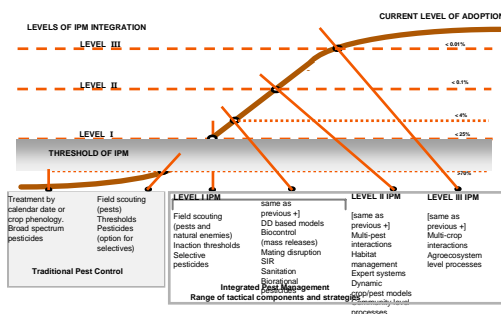


Background



Level III Ecoregions in Oregon, with Agricultural Land Superimposed

CONCEPTUAL REPRESENTATION OF IPM AT THREE BASIC LEVELS OF INTEGRATION



IPM is conceptualized at three levels of integration: I. Integration of control methods for single pests; II. Integration of multiple pest impacts (weeds, insects, pathogens); III. Integration of multiple pests and control methods within whole cropping systems. Percentages of adoption on the right are gross estimates based on the literature (concept and graphic by Marcos Kogan).

Record of Introduction and Establishment

There are significant differences in the scale and success of arthropod and weed classical biological control programs in Oregon (arthropod data 1964-1989, Western Region Project W-84; weed data from Oregon Department of Agriculture database, 1970's-present day). The success of the weed control program can be attributed to a highly effective partnership between ODA and OSU.

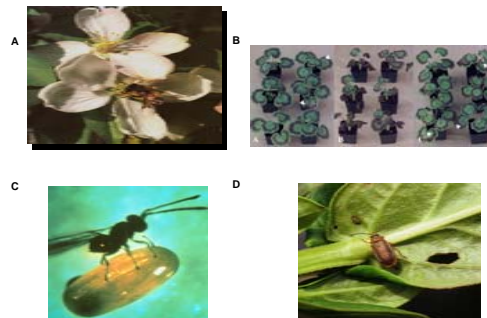
Biological control discipline	Target pests	Number of introduced agents	Number of agents established
Arthropod control	8	17	1
Weed biological control	28	98	42

Renewed Emphasis on Biologically-Based Pest Management

Recent developments:

A **Biologically-based pest management workshop** was jointly organized by OSU, USDA ARS and ODA, on December 13th 2003.

The workshop program and a summary of discussions and conclusions can be found in the **Oregon IPM Newsletter** (January 2003 edition) at <http://oregonipm.ipcc.orst.edu>.



Examples of programs:

A) Fire Blight biocontrol with BlightBan A506 (Johnson, Stockwell, OSU; Loper, USDA), B) *Botrytis* biocontrol (Mahafee, USDA), C) Cereal Leaf Beetle biocontrol with *Anaphes flavipes* (Bai, ODA), D) Purple Looper biocontrol with *Galerucella californiensis* (McEvoy, OSU; Coombs, ODA).

Pathways to Progress

We have identified considerable scope for collaboration between agencies (OSU, ODA, USDA) and the traditional disciplines.

Further workshops, conferences, newsletters etc. are being planned, and the group has identified acquisition of a graduate training grant as a key facilitator of collaboration.

A conference on **Biologically-Based IPM in the Pacific Northwest** is also being planned as an activity of the *Western Region IPM Center*. Please let us know if you wish to be informed of progress in planning.

The lead contributors to this effort include: Peter McEvoy, Sujaya Rao, John Luna (OSU), Eric Coombs, Barry Bai, Kathleen Johnson (ODA), Joyce Loper, Walt Mahafee (USDA ARS), and the more than 40 others that attended and participated in the workshop

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