## Northeastern IPM Center - 2014 Spotted Wing Drosophila Working Group Priorities

Priorities with the higher "Rating" have a higher priority ranking. Ratings range from 0 to 100, with 100 being highest priority. Priorities were rated during the SWD IPM Working Group meeting on September 16, 2014.

## **Working Group Ratings**

|      |   | 2014   |
|------|---|--------|
| Rank | SWD Research Priorities   | Rating |
| 1    | Behavioral control (repellants, attract & kill, mass trapping, push/pull, trap crops) | 90.04  |
| 2    | Economic Analysis   | 90.00  |
| 3    | Know what to do - recommendations for next season                                     | 87.78  |
| 4    | Cultural control  | 86.96  |
| 5    | Biological control  | 83.87  |
| 6    | Optimize use of insecticides (# applications, etc.)                                   | 82.74  |
| 7    | Optimizing sampling and management practices  | 81.74  |
| 8    | Early detection monitoring tools  | 81.43  |
| 9    | Insecticide application technology  | 79.55  |
| 10   | Overwintering biology   | 79.09  |
| 11   | Organic research - materials  | 77.00  |
| 12   | Life cycle research and DD to better time control management                          | 76.95  |
| 13   | Feeding stimulants - synergists - adjuvants   | 76.70  |
| 14   | Exclusion for small growers   | 76.63  |
| 15   | Developmental models - predictions, validation  | 76.27  |
| 16   | Dispersal and migration / population genetics   | 76.05  |
| 17   | Insecticide residue degradation and modeling (weathering properties, rainfastness)    | 76.04  |
| 18   | Insecticide resistance management   | 74.96  |
| 19   | New chemicals   | 74.78  |
| 20   | Identification of host-plant volatiles  | 74.78  |
| 21   | Life cycle and ecology  | 74.62  |
| 22   | Spray materials - season long - ovicide materials                                     | 74.00  |
| 23   | Landscape ecology - better understanding  | 73.30  |
| 24   | Post-harvest management - packing houses  | 72.50  |
| 25   | Collaborations with researchers from other countries                                  | 72.04  |
| 26   | Full insecticide screening  | 70.86  |

| 27 | Sanitation  | 68.35 |
|----|---|-------|
| 28 | Early season hosts and refugia  | 67.29 |
| 29 | Mechanisms for post harvest treatment, ie, defect sorting etc.  | 66.91 |
| 30 | Treatment thresholds  | 66.00 |
| 31 | Variety preferences   | 64.87 |
| 32 | Resistant varieties   | 63.74 |
| 33 | SWD genetic control   | 63.48 |
| 34 | Symbionts associated with SWD (fungi, bacteria, spirochetes, etc.)  | 61.33 |
| 35 | Curative control - systemic insecticides - kill maggot  | 60.95 |
| 36 | Role of ground cover management   | 58.96 |
| 37 | Host resistance mechanisms  | 57.19 |
| 38 | Identify characteristics of firm fruit for SWD oviposition and of fruit after oviposition/time when fruit softens | 52.24 |
| 39 | Damage to different crops (other than berries)  | 49.59 |
| 40 | Mechanical control in greenhouses   | 46.86 |

|      |   | 2014   |
|------|---|--------|
| Rank | SWD Extension Priorities  | Rating |
| 1    | Continue working group, networking  | 93.77  |
| 2    | Bring educational resources together for grower use   | 87.87  |
| 3    | Develop recommendations for 2013 as part of an IPM program  | 87.32  |
| 4    | Education on monitoring, fields/berries, SWD identification   | 86.82  |
| 5    | Grower Education about spray technology   | 85.00  |
| 6    | Info on sprayer technology  | 83.05  |
| 7    | Preparation for next year   | 82.21  |
| 8    | Pruning as a Management Tool  | 79.38  |
| 9    | Grower awareness of problem and post harvest treatment  | 76.50  |
| 10   | Establish a clearing house for information - international; distill in user friendly form for SWD IPM         | 74.74  |
| 11   | Attention to Crop Load  | 74.00  |
| 12   | Allow for unique properties of each insecticide in recommendations and management programs                    | 72.71  |
| 13   | Grower education of full impact of problem and research efforts   | 72.36  |
| 14   | IPM for invasive species, as well as detection  | 69.73  |
| 15   | Overhead chemigation information  | 65.71  |
| 16   | Distinguish between large and small acreage grower needs  | 65.38  |
| 17   | Train consultants   | 64.14  |
| 18   | Call for summit: ext, research, govt, regulatory, policy, APHIS (national statement), industry (grower, chem) | 59.05  |

|   | 19 | Look at international education efforts | 58.14 |
|---|----|---|-------|
| Γ | 20 | Training on invasive species            | 55.00 |
| Γ | 21 | Education of master gardeners           | 48.55 |

|      |  | 2014   |
|------|--|--------|
| Rank | SWD Regulatory Priorities  | Rating |
| 1    | New chemicals  | 90.61  |
| 2    | National sec 18 system and 2ee, expand 'me too'                          | 83.75  |
| 3    | As short as feasible PHI across crops                                    | 82.61  |
| 4    | OMRI clearance of materials  | 82.27  |
| 5    | Est. a working group - industry, growers, extension, for economic impact | 71.19  |
| 6    | Est. MRL's for export markets  | 67.23  |
| 7    | Pesticide container size in small amounts                                | 66.95  |
| 8    | Labels for chemigation   | 59.41  |

|      |  | 2014   |
|------|--|--------|
| Rank | SWD Education Priorities   | Rating |
| 1    | Educating policy makers/legislators/regulators on invasives/impacts          | 88.33  |
| 2    | Involvement of the chemical industry in WG                                   | 85.83  |
| 3    | Info. for growers to respond to public on SWD or media [US Highbush council] | 85.81  |
| 4    | Media kit [use BMSB as example]  | 85.41  |
| 5    | Company education on labeling and crop uses                                  | 71.71  |
| 6    | Engaging/joining IPM voice   | 69.80  |
| 7    | Consumer education   | 64.76  |