**Research and Discussion/Milestones**

**Table 1**. Growing degree day and plant phenological indicator data for different insect phenology stages of the first generation of redheaded flea beetle, *Systena* *frontalis*, during the growing season 2012.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Insect life stage | Soil probe location | Growing degree days (GDD) base | | | Plant phenological indicator |
| 45˚F  (7.2˚C) | 48.7˚F (9.3˚C) | 50˚F (10˚C) |
| Larva | Air | 469 – 770 | 301 – 547 | 257 – 481 | Black locust, full bloom; *Itea*, full bloom; Chinese fringetree full bloom; wild cherry trees, bloom; azaleas, bloom |
| Pot | 467 – 808 | 274 – 564 | 211 – 482 |
| Soil | 467 – 846 | 274 – 598 | 211 - 514 |
| Adult | Air | 891 – 1126 | 649 – 854 | 590 – 785 | *Ilex* verticillata, full bloom, *Hydrangea* *macrophylla*, full bloom; *Magnolia* *grandiflora*, bloom – full bloom |
| Pot | 991 – 1255 | 725 – 959 | 635 – 859 |
| Soil | 1003 – 1266 | 736 – 970 | 646 – 869 |

**Table 2**. Growing degree day and plant phenological indicator data for different insect phenology stages of the second generation of redheaded flea beetle, *Systena* *frontalis*, during the growing season 2012.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Insect life stage | Soil probe location | Growing degree days (GDD) base | | | Plant phenological indicator |
| 45˚F  (7.2˚C) | 48.7˚F (9.3˚C) | 50˚F  (10˚C) |
| Larva | Air | 2270 - 2347 | 1857 – 1993 | 1818 - 1856 | Crape myrtle ‘Hopi Pink’, full bloom; ‘Siren red’, early bud – bud swell; *Hosta*, full bloom; *Hibiscus*, bloom; Butterfly bush ‘Miss Molly’, full bloom – petal fall; *Cerastigma* *plumbaginoides*, bloom |
| Pot | 2693 – 2890 | 2257 – 2439 | 2107 - 2284 |
| Soil | 2629 – 2796 | 2308 – 2460 | 2043 – 2190 |
| Adult | Air | 2739 – 2890 | 2279 – 2411 | 2100 - 2240 | None were readily detected |
| Pot | 3287 – 3469 | 2802 – 2966 | 2635 – 2843 |
| Soil | 3160 – 3341 | 2790 – 2954 | 2508 – 2665 |