**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.

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| --- | --- | --- | --- |
| 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.

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| --- | --- | --- | --- |
| 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  |