

Redheaded flea beetle - life stage predictions for South, Central, and Northern New Jersey with material considerations

Calendar date predictions for target range as of 8/4/2021

Information compiled by Dr. Timothy J. Waller - Rutgers Cooperative Extension (2021)

Growth Stage	Gen.	GDD50 TARGET RANGE	GDD50 TARGET RANGE	SOUTH		CENTRAL		NORTH		Material / Compound Considerations (Examples = no endorsements implied) [IRAC GROUP #]	
				Upper Deerfield (NJ50)		Howell (NJ10)		High Point (NJ59)			
				LOW (DATE)	HIGH (DATE)	LOW (DATE)	HIGH (DATE)	LOW (DATE)	HIGH (DATE)		
Egg hatch - larvae	1st	242	600	2-May	29-May	10-May	6-Jun	24-May	21-Jun	NOTES Systemic (S) - Contact (C) - Biologicals (B) - Herbicides (H)	SYSTEMIC Cyantraniliprole [28] (Mainspring) Chlorantraniliprole [28] (Acelepryn) Neonicotinoids [4A] Dinotefuran (Safari 20SC) ; Thiomethoxam (Flagship 25 WG) ; Imidacloprid (Imidacloprid 2F, Marathon 1G, Marathon II) ; cyfuthrin [3A] + imidacloprid (Discus)
Adults (feeding / laying eggs)	1st	517	1028	24-May	20-Jun	5-Jun	28-Jun	9-Jun	9-Jul	(S/C/B) Start adult contact sprays - continue systemic treatments (H) Control weeds - adults will hide-in and feed-on them - Adult feeding damage will be apparent - Scout to determine best time for applications - Use of agitator compounds may drive adults from hiding	Organophosphates [1B] Acephate (Orthene, Acephate 97UP)
Egg hatch - larvae	2	1570	1860	POTENTIAL OVERLAP OF GENERATIONS / STAGES						(S) Continue systemic treatments (C/B) Contact materials to target larvae AND adults - Potential for considerable overlap of larvae - adult stages (H) Control weeds - adults will hide-in and feed on them	CONTACT Bifenthrin [3A] (UP Star SC, Talstar Select) Carbamates [1A] - Carbaryl (Sevin SL) Tolfenpyrad [21A] (Hachi-Hachi SC) Cyclaniliprole [28] + Flocicamid [29] (Pradia)
				11-Jul	21-Jul	19-Jul	30-Jul	5-Aug	21-Aug		
Adults (feeding / laying eggs)	2	1878	2318	22-Jul	7-Aug	31-Jul	18-Aug	21-Aug	1-Oct	(C/B) Adult contact sprays (S) * If pest pressure is high * - continue systemic materials (H) Control weeds - adults will hide-in and feed-on them - Adult feeding damage will be apparent - Use of agitator compounds may drive adults from hiding	BIOLOGICAL / BIORATIONAL Azadirachtin (Aza-Direct, Azatin-O) Beneficial nematodes (Millennium) Entomopathogenic fungi (Ancora, BotaniGuard) Agitator (Captiva Prime)
* A third generation of larvae and feeding adults is possible in the southern and central regions *										Estimated using USPEST.org, 3.5-month CFSv2 based seasonal climate forecast, simple average growing degree-days, min temp: 50F, max temp: 95F. Insect development growing degree-day ranges based on trials by Dr. Kunkel - Extension Specialist - University of Delaware - subject to change	