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

Calendar date predictions for target range as of 4/27/2023



		GDD50	GDD50	SOU	UTH	CENTRA	L	NORTH		NOTES	
Growth Stage	Gen.	TARGET RANGE	TARGET RANGE	Upper Deerfield (NJ50)		Howell (NJ10)		High Point (NJ59)		(high infestation locations)	Material / Compound Considerations (Examples = no endorsements implied)
D		-LOW-	-HIGH-	LOW (DATE)	HIGH (DATE)		IIGH ATE)		HIGH (ATE)	Systemic (S) - Contact (C) - Biologicals (B) - Herbicides (H)	[IRAC GROUP #]
Egg hatch - larvae	1	242	600	4/21	5/28	5/6	6/4	5/19	6/16	(S) Initiate systemic treatments 1-month prior to adult activity (S) Systemic granular or granular incorporation @ planting is effective (C) Contact materials may be used to knock-down larvae (B) Some bio-rational / logicals are effective on larvae	SYSTEMIC DRENCHES Cyantraniliprole [28] (Mainspring) Chlorantraniliprole [28] (Acelepryn) Organophosphates [1B] - Acephate (Orthene, Acephate 97UP) Neonicotinoids [4A]- Dinotefuran (Safari 20SC); Thiomethoxam (Flagship
										- Look for larval activity on the outside of root balls - Larvae may be active prior to this GDD50 timeframe	25 WG) ; Imidacloprid (Imidacloprid 2F, Marathon 1%G, Marathon II)
Adults (feeding / laying eggs)	1	517	1028	5/22	6/17	5/30	6/25	6/11	7/9	(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	GRANULAR APPLICATIONS and INCORPORATIONS Neonicotinoids [4A] Imidacloprid (Marathon 1%G, Coretect tablets, Mallet 0.5G)
88 /						TENTIAL OVERLAP O				- Use of agitator compounds may drive adults from hiding	(Initiate systemic treatments 1-month prior to adult activity)
					GENERATIONS / STAC			GES		(S) Continue systemic treatments	CONTACT
Egg hatch - larvae	2	1570	1860	7/8	7/19	7/17	7/28	8/3	8/18	(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	Bifenthrin [3A] (UP Star SC, Talstar Select) Clyfluthrin [3] (Decathalon 20WP) - Rotation partner Carbamates [1A] - Carbaryl (Sevin SL) Tolfenpyrad [21A] (Hachi-Hachi SC) Cyclaniliprole [28] (Sarisa) + Flonicamid [29] (Pradia)
Adults (feeding / laying eggs)	2	1878	2318	7/19	8/4	7/28	8/15	8/18	9/15	(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) Adult Agitator (Captiva Prime)
* A third generation of larvae and feeding adults is possible in the							ho	Estimated using USPEST.org, 3.5-month CFSv2 based seasonal climate forecast, simple average growing degree-days, min temp: 50F, max temp: 95F.			
southern and central regions *							ne -	Insect development growing degree-day ranges based on trials by Dr. Kunkel - Extension Specialist - University of Delaware. Insecticide selection based on research by Danny Luaderdale - Area Specialized Agent - Nursery Crops - NC State.			

SYSTEMIC DRENCHES

Cyantraniliprole [28] (Mainspring)

Chlorantraniliprole [28] (Acelepryn)

Organophosphates [1B] - Acephate (Orthene, Acephate 97UP)

Neonicotinoids [4A]- Dinotefuran (Safari 20SC); Thiomethoxam (Flagship 25 WG); Imidacloprid (Imidacloprid 2F, Marathon 1%G, Marathon II)

GRANULAR APPLICATIONS and INCORPORATIONS Neonicotinoids [4A] Imidacloprid (Marathon 1%G, Coretect tablets, Mallet 0.5G) (Initiate systemic treatments 1-month prior to adult activity)

CONTACT

Bifenthrin [3A] (UP Star SC, Talstar Select) Clyfluthrin [3] (Decathalon 20WP) - Rotation partner Carbamates [1A] - Carbaryl (Sevin SL)

Tolfenpyrad [21A] (Hachi-Hachi SC)

Cyclaniliprole [28] (Sarisa) + Flonicamid [29] (Pradia)

BIOLOGICAL / BIORATIONAL

Azadirachtin (Aza-Direct, Azatin-O) Beneficial nematodes (Millennium) Entomopathogenic fungi (Ancora, BotaniGuard) Adult Agitator (Captiva Prime)

DISCLAIMER: The label is the law, always refer to it for allowable host crops, use-restrictions, application rates, reapplication intervals, re-entry intervals (REI), application timing, and mix compatibility information. Production and pesticide information on this site are for private/commercial pesticide applicators and landscape professionals only, and are NOT for home gardener use. Provided materials represent examples and do not cover all possible control scenarios. Trade-names listed do not imply endorsement and are used as examples only. Please contact your local agent or chemical sales representative for more information or to discuss additional pest management options.