

DAMAGE OVER TIME BY CARROT WEEVIL IN PROCESSING CARROTS, 2007

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'Campbells SDC1374' cv. carrots were seeded into a sandy loam field 21 Apr with a JD Agricola vacuum seeder. The field consisted of a total of fourteen 5-ft beds, each bed 150-ft long with three 15" rows of carrots. A Boivin carrot weevil trap was placed in each corner of the field, within a row approximately 5-ft from the field edge. Traps were baited with a fresh carrot every 7-10 days. On 22 Jun, 25 carrot seedlings in the center row of each of four carrot beds were harvested and all carrots (including insect- and disease-damaged carrots) were examined for carrot weevil injury was recorded, and the carrots were then dissected to determine number of weevils in the roots. Carrots were harvested and examined for damaged roots approximately every week until 7 August.

Carrot weevil adults were consistently trapped from 8 June thru August in the carrot field. Carrot weevil eggs were detected in the carrot roots on each date examined from 8 June thru 26 July, although the number of eggs recorded declined as the season progressed (Table 1). The percentage of carrot roots damaged by carrot weevil increased from 8 June (19%) to 7 August (93%) (Fig. 1). Damage increased most rapidly from 22 June through 6 July, (from 20% to 75%), after which damage increased slightly mid-July until 2 August (from 75% to 92%).

Table 1. Carrot weevil adults trapped in Boivin traps and number of carrot weevil larvae/25 carrots over time in a processing carrot field, 2007.

Date	Boivin CW Traps	
	# carrot weevil adults trapped	# carrot weevil eggs/25 carrots
June 8	2	4.8
June 14	3	3.8
June 21	1	1.8
July 2	1	1.5
July 7	2	0.8
July 19	2	0.3
Jul 26	1	0.5
Aug 2	-	0

Fig. 1. . Percentage carrot weevil-damaged carrots over time in a processing carrot field, Bridgeton, NJ 2007.

