Table 37 continued. Bramble pest management schedule†.

Pest	Spray Material, Rate/A (pre-harvest interval)	Cultural Practices and Scouting Notes	Comments
Japanese beetle	Same as under pre-bloom section.		
Two-spotted spider mites	Same as under fruiting section.	Contact your local Extension Specialist for help locating sources for beneficial insects.	

[†]Where brand names for chemicals are used, it is for the reader's information. No endorsement is implied, nor is discrimination intended against products with similar ingredients. Please consult pesticide product labels for rates, application instructions and safety precautions. Users of these products assume all associated risks.

Table 38. Fall bearing (primocane fruiting) bramble pest management schedule[†].

When canes are approximately 18 inches tall					
Pest	Spray Material, Rate/A (pre-harvest interval)	Cultural Practices and Scouting Notes	Comments		
Cane borers		Cut off infested tips below girdle marks, remove canes showing swellings	Scout for presence of adults. Adult cane borer activity can occur from early May through early August.		
Japanese beetle	Sevin XLR Plus, 1-2 qt (7) Malathion 57EC, 1.5 pt (1)	Traps may reduce populations.	Apply spray only if beetles are present.		
	Pyrenone Crop Spray 0.5EC, 2-12 oz (0)	Place traps at least 50 feet away from planting.	Check labels for specific restrictions.		
	Aza-direct, 12.5-42 oz (0) Surround WP, 12.5-50 lb (0)				
From petal-fall thro	ough the beginning of harvest				
Sap beetles	Malathion 57 EC, 1.5 - 2 pt, (1) Aza-direct 12.5 - 42 oz (0)	Keep planting clean of over-ripe fruit	Malathion labeled for raspberry only, not other bramble fruit.		
Tarnished plant bug	Sevin XLR Plus, 1.5-2 qt (7) Pyrenone Crop Spray 0.5EC, 2-12 oz (0) Aza-direct 12.5 - 42 oz (0)	Keep planting free of weeds. Action threshold for nymphs or adults is when 10-20% of canes are infested.	Apply pre-bloom if adults found in planting, but avoid insecticide spays during bloom.		
	7124 direct 12.3 42 62 (0)	Adults migrate to fruit when adjacent fields are mowed.	Apply sprays in evening.		

^{*}Restricted use pesticide; pesticide applicators license required.

From petal-fall through the beginning of harvest					
Pest	Spray Material, Rate/A (pre-harvest interval)	Cultural Practices and Scouting Notes	Comments		
Botrytis fruit rot (gray mold)	Rovral 50WP,1-2 lb (0) Ronilan DF, 2 lb (9) Cabrio EG, 14 oz (0) Elevate 50WDG, 1.5 lb (0)	Space rows at least 8 feet apart, prune canes to a density of 3 to 4 canes per sq. ft. to improve air circulation.	Apply at 5% bloom and again at full bloom. Repeat application only if weather is wet. Overuse of these materials may result in the development of resistance in the fungus. Elevate is permitted under a supplemental label. Do not make more than 2 consecutive applications and do not usemore than 6 lb per season.		
Fruit rot sprays or	special sprays				
Two-Spotted spider mite	M-Pede, 1-2% (0) Aza-direct, 11.5-42 (0) Savey 50 WP, 4-6 oz (3)	Predatory mites may help. Avoid use of pesticides which will kill natural enemies of mites such as carbaryl.	Sulfur (80% WP) applied at 5-10 lb/100 gal for powdery mildew will provide some suppression. Do not use M-Pede within 3 days of a sulfur application. Savey may only be applied once per year post harvest.		
Phytophthorarootrot	Ridomil Gold EC, 1/4 pt/1000 linear ft. (45) Ridomil Gold GR, 5 lb/1000 linear ft. (45) Aliette WDG, 5 lb (60)	Plant only in well-drained soils. Planting on raised beds also significantly reduces Phytophthora incidence. Cultivars Latham and Newburgh appear to be somewhat resistant.	Apply Ridomil in 3 ft wide band over the row in early fall; repeat in early spring before growth begins. Apply Aliette in sufficient water to thoroughly wet the foliage. Begin foliar sprays in the spring after bud break and continue spraying on a 45-60 day schedule up to a maximum of 4 sprays during the growing season.		
Botrytis fruit rot (gray mold)	same as petalfall section				

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