

Table 34. Postplant nitrogen recommendations for brambles.

Year	IRRIGATED			NON-IRRIGATED		
	Sandy	Loamy	Clay	Sandy	Loamy	Clay
FALL-BEARING REDS (NO SUMMER CROPS)						
1	40	30	25	35	30	25
2	80	70	60	70	65	50
3+	120	100	90	90	80	70
SUMMER-BEARING REDS						
1	35	20	25	30	25	25
2	55	50	45	45	40	35
3+	80	70	60	60	50	40
SUMMER-BEARING BLACKS AND PURPLES						
1	30	25	25	25	20	20
2	45	40	35	35	30	25
3+	60	50	45	45	40	30

Note: Rates should be adjusted according to leaf tissue analysis
 Courtesy Cornell University.

Table 35. Critical nutrient values for bramble tissue analysis.

Element	Deficient	Below Normal	Normal	Above Normal	Excessive
N (%)	1.80	2.00	2.50	3.00	>3.00
P (%)	0.23	0.25	0.35	0.40	>0.40
K (%)	1.45	1.50	2.00	2.50	>2.50
Ca (%)	0.57	0.60	1.70	2.50	>2.50
Mg (%)	0.27	0.30	0.70	0.90	>0.90
Mn (ppm)	45	50	150	200	>200
Fe (ppm)	48	50	150	200	>200
Cu (ppm)	6	7	30	50	>50
B (ppm)	28	30	40	50	>50
Zn (ppm)	18	20	35	50	>50

Source: PennState University

Diseases

Fruit and Foliage Diseases

Botrytis Fruit Rot; Gray Mold (*Botrytis cinerea*): Raspberries are very susceptible to fruit rots caused by fungi, especially during wet weather. To prevent fruit rots from becoming a major problem, encourage air circulation and rapid drying of the plants and fruit by maintaining narrow plant rows, and proper cane thinning. Harvest fruit regularly. Do not allow overripe or rotten fruit to remain on the plants.

Management: Infections can occur as early as

bloom, so preventative fungicide sprays should be applied beginning at that time, and followed-up with additional sprays when wet weather is predicted. See pest management schedule for recommended materials and timing. To prevent molds from developing after harvest, cool the fruit as rapidly as possible after picking and maintain them at about 33½F until they are sold. Never place raspberries in containers more than 3 fruit deep, and avoid rough handling.

Powdery Mildew (*Sphaerotheca macularis*): Powdery mildew affects susceptible cultivars of red,