

Bush Fruits

Blueberries and Cranberries (*Vaccinium spp.*)

French: Airelles & Canneberges; Spanish: Arandanos; Italian: Mirtillos & Mortellas; German: Blaubeeren & Preiselbeeren

Optimum soil pH for blueberries 4.5 - 5.0 and for cranberries even a little lower. Annual nutrient uptake is relatively small. Unselected wild varieties require lower fertility level than improved varieties. Indicative contents of nutrient elements in the leaf dry matter are shown in the table below:

Plant analysis data - Macronutrients				
Variety	% of leaf dry matter			
	N	P	K	Mg
High-bush (<i>V. corymbosum</i>)	2	0.18	0.5	0.2
Low-bush (<i>V. angustifolium</i>)	1.9	0.16	0.5	0.2
Rabbit-eye	1.5	0.1	0.15	0.1

The **leaf nutrient content** depends on the position on the plant, on dilution during rapid growth in spring, on the soil fertility level and on the available soil volume per plant. The N content declines markedly later in the season, e.g. in *V. angustifolium* from 2.01 % on 24 June to 1.26 % by 26 August or, with added N (75 kg/ha N on 5 May and 40 kg/ha N on 15 July), from 2.49 % on 24 June to 1.63 % on 26 August.

Fertilizer recommendations: Mulching is commonly practised in bush fruit cultivation to ensure nutrient recycling and outgrowth potential for superficial rootlets and to suppress weed competition, though in regions with severe winters intensive mulching may delay winter hardening of plant tissue. Because decaying organic materials incorporate free N and P, some addition of fertilizer is desirable. This input will return in available form in due course. The following rates of application are recommended for high-bush blueberries in Eastern Canada, based on a spacing of 3 m x 1.2 m or 2 690 bushes/ha:

Age in years since set in field	Recommended rate of 10-10-10-2 fertilizer	
	g/plant	kg/ha
Up to 3	25	75
4 - 5	40	115
6 - 7	85	230
8 - 9	125	345
10 and over	170	455

Source: Craig, 1980

Raspberry (*Rubus spp.*) and related species and crosses (*loganberry, boysenberry, etc.*)

French: Framboise; Spanish: Frambuesa; Italian: Lampono; German: Himbeere

Optimum pH 6 -7. Nutrient uptake somewhat greater than that of blueberries.

Fertilizer recommendations (Netherlands): 50 t/ha farmyard manure at planting, followed by, for raspberries, in spring about 100 kg/ha N and 300 kg/ha K₂O and from flowering to fruit-set about 60 - 70 kg/ha N in split dressings, and, for blackberries, in spring about 60 kg/ha N, 50 kg/ha P₂O₅ and 90 kg/ha K₂O (best in form of a 12-10-18 fertilizer) and from flowering to fruit-set around 50 kg/ha N in split dressings.

Currants (*Ribes spp.*)

French: Groseille; Spanish: Grosella; Italian: Ribes; German: Johannisbeere

Optimum pH 6 - 7. Nutrient uptake greater than that of raspberries.

Indicative contents of nutrient elements in the leaf dry matter, varying with position on the plant and other factors (see Blueberries): 3 % N, 0.3 % P, 1.5 - 3.0 % K, 0.3 % Mg.

Fertilizer recommendations (Netherlands): 50 t/ha farmyard manure at planting, followed in spring by 300 kg/ha K₂O and from flowering to fruit-set 60 - 70 kg/ha N in split dressings.

Further reading

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