



PLANT & TISSUE GUIDELINES - FRUIT & NUT

Logan Labs, 620 North Main Street, Lakeview, OH 43331
937-842-6100 | www.loganlabs.com

APPLE, LEAVES FROM CURRENT SEASON GROWTH

Survey Average

Macronutrients	%	Micronutrients	ppm	Nonessential Elements	ppm
N	2.0-2.3	B	25-60	Al	<200
P	0.15-0.5	Cu	5-20		
K	1.25-3.0	Fe	55-400		
Ca	1.1-2.3	Mn	25-200		
Mg	0.2-0.5	Zn	20-60		
S	0.09-0.17	Mo	0.5-1.5		

APRICOT, 50 MATURE LEAVES FROM NEW GROWTH

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.0-2.5	B	25-70
P	0.13-0.35	Cu	5-25
K	2.5-3.0	Fe	70-150
Ca	1.6-2.5	Mn	25-100
Mg	0.3-1.2	Zn	20-100
S	no data	Mo	no data



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BANANA, 6-9 MONTHS INTO PRODUCTION SEASON

Survey Average

Macronutrients	%	Micronutrients	ppm
N	3.5-4.5	B	10-50
P	0.2-0.4	Cu	6-25
K	3.8-5.0	Fe	75-300
Ca	0.8-1.5	Mn	100-1000
Mg	0.25-0.8	Zn	20-100
S	0.25-0.8	Mo	no data

BLUEBERRY, LEAVES AT OR AFTER HARVEST

Survey Average

Macronutrients	%	Micronutrients	ppm
N	1.6-2.2	B	13-40
P	0.1-0.2	Cu	2-20
K	0.3-0.6	Fe	45-200
Ca	0.3-0.5	Mn	30-200
Mg	0.1-0.2	Zn	12-30
S	no data	Mo	no data



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WINE OR EUROPEAN TABLE GRAPE

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.0-2.3	B	25-70
P	0	Cu	5-50
K	0.3-0.4	Fe	60-175
Ca	1.3-1.4	Mn	30-300
Mg	2-2.5	Zn	25-100
S	0.25-0.5	Mo	0.15-0.35

MACADAMIA NUT, 30 MATURE LEAVES FROM NEW GROWTH

Survey Average

Macronutrients	%	Micronutrients	ppm
N	1.4-2.5	B	25-100
P	0.07-0.25	Cu	4-12
K	0.45-1.5	Fe	25-200
Ca	0.5-1.0	Mn	50-1500
Mg	0.08-0.3	Zn	15-25
S	0.1-0.25	Mo	0.5-2.5



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PEACH

Survey Average

Macronutrients	%	Micronutrients	ppm	Nonessential Elements	ppm
N	2.8-3.8	B	25-100	Al	<400
P	0.18-0.5	Cu	6-20		
K	1.4-3.0	Fe	60-400		
Ca	1.7-2.5	Mn	50-150		
Mg	0.23-0.55	Zn	17-50		
S	0.2-0.4	Mo	0.3-1.5		

PECAN, LEAVES (MIDDLE PAIR LEAFLETS)

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.5-4.0	B	22-50
P	0.13-0.32	Cu	11-35
K	0.75-1.3	Fe	50-300
Ca	0.75-1.5	Mn	100-800
Mg	0.3-0.65	Zn	50-100
S	0.2-0.5	Mo	no data



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RASPBERRY RED

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Macronutrients	%	Micronutrients	ppm	Nonessential Elements	ppm
N	2.5	B	50	Al	220
P	0.25	Cu	35		
K	1.8	Fe	220		
Ca	1.4	Mn	425		
Mg	0.5	Zn	45		
S	no data	Mo	no data		

CHERRY SOUR

Survey Average

Macronutrients	%	Micronutrients	ppm	Nonessential Elements	ppm
N	3.18	B	34	Al	170
P	0.28	Cu	25		
K	2.11	Fe	190		
Ca	1-Jan	Mn	85		
Mg	0.43	Zn	35		
S	no data	Mo	no data		



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CHERRY SWEET

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.65	B	13
P	0.2	Cu	32
K	1.45	Fe	130
Ca	1-Jan	Mn	105
Mg	0.4	Zn	22
S	no data	Mo	no data

CITRUS

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.5-2.7	B	36-100
P	0.12-0.16	Cu	5-16
K	1.2-1.7	Fe	60-120
Ca	3.0-4.9	Mn	25-100
Mg	no data	Zn	25-100
S	0.3-0.49	Mo	0.1-1.0



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CRANBERRY

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Macronutrients	%	Micronutrients	ppm
N	0.8-1.2	B	15-50
P	0.1-0.25	Cu	5-15
K	0.4-0.8	Fe	60-125
Ca	0.5-0.9	Mn	75-200
Mg	0.15-0.3	Zn	25-40
S	0.1-0.15	Mo	no data

GRAPES "MUSCADINE"

Survey Average

Macronutrients	%	Micronutrients	ppm
N	1.65-2.2	B	15-25
P	0.12-0.18	Cu	6-30
K	0.8-1.2	Fe	50-120
Ca	0.7-1.1	Mn	45-150
Mg	0.15-0.25	Zn	20-40
S	0.2-0.4	Mo	no data



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GRAPES VARIOUS, PETIOLES & LEAVES

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Macronutrients	%	Micronutrients	ppm
N	1.65-2.2	B	15-25
P	0.12-0.18	Cu	6-30
K	0.8-1.2	Fe	50-120
Ca	0.7-1.1	Mn	45-150
Mg	0.15-0.25	Zn	20-40
S	0.2-0.4	Mo	no data

PAPAYA

Survey Average

Macronutrients	%	Micronutrients	ppm
N	1.01-2.5	B	20-30
P	0.22-0.4	Cu	4-10
K	3.3-5.5	Fe	25-100
Ca	1.0-3.0	Mn	20-150
Mg	0.4-1.2	Zn	15-40
S	no data	Mo	no data



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PEAR

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Macronutrients	%	Micronutrients	ppm	Nonessential Elements	ppm
N	2.2-3.0	B	30-60	Al	<200
P	0.17-0.45	Cu	7-20		
K	1.25-3.0	Fe	50-200		
Ca	1.0-2.0	Mn	30-200		
Mg	0.2-0.5	Zn	20-60		
S	0.1-0.15	Mo	0.5		

STRAWBERRIES, MID SEASON TO YOUNG MATURE LEAVES

Survey Average

Macronutrients	%	Micronutrients	ppm
N	2.0-4.0	B	20-40
P	0.25-0.43	Cu	6-40
K	1.25-2.5	Fe	60-200
Ca	1.0-1.8	Mn	60-250
Mg	0.25-0.6	Zn	28-160
S	0.25-0.6	Mo	no data



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RASPBERRY BLACK, LEAVES

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Macronutrients	%	Micronutrients	ppm
N	3.5	B	35
P	0.22	Cu	65
K	1.5	Fe	260
Ca	1.1	Mn	344
Mg	0.45	Zn	40
S	no data	Mo	no data