

PLANT ANALYSIS FOR NUTRIENT LEVELS FOR CROPS

SOME AVERAGE VALUES AND CRITICAL LEVELS FOR VARIOUS COMMERCIAL CROPS ARE LISTED ON THE FOLLOWING PAGES. THESE VALUES SHOULD BE USED AS A REFERENCE ONLY AND SHOULD BY NO MEANS BE CONSIDERED ABSOLUTE OR CONCLUSIVE.

DESCRIPTION		PERCENT						PARTS PER MILLION				
ALFALFA		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	4.60	.46	3.68	3.68	.46	.46	95	36	60	13	44
	2	4.60	.40	2.70	1.80	.42	.36	Same for all stages				
	3	4.20	.42	2.70	2.20	.42	.36					
	4	3.80	.40	2.70	2.20	.42	.36					
ALMONDS												
Stage	1	3.20	.32	2.56	2.56	.32	.32	13	37	60	16	42
	2	3.80	.38	3.04	3.04	.38	.38	Same for all stages				
	3	3.40	.34	3.04	3.04	.34	.34					
	4	3.00	.30	3.00	3.00	.30	.30					
APPLES												
Stage	1	2.10	.21	1.68	1.68	.21	.21	105	25	65	12	31
	2	2.50	.25	2.00	2.00	.25	.25	Same for all stages				
	3	2.20	.22	2.20	2.20	.22	.22					
	4	2.00	.20	1.60	1.60	.20	.20					
APRICOTS												
Stage	1	2.60	.26	2.00	2.00	.30	.30	110	35	70	18	38
	2	3.10	.26	2.00	2.00	.30	.30	Same for all stages				
	3	2.90	.30	2.40	2.40	.30	.30					
	4	2.70	.30	2.40	2.40	.25	.30					
ASPARAGUS												
Stage	1	3.60	.38	3.04	3.04	.38	.38	150	35	60	55	35
	2	4.60	.46	3.68	3.68	.46	.46	Same for all stages				
	3	4.60	.46	4.60	4.60	.46	.46					

DESCRIPTION		PERCENT					PARTS PER MILLION					
BARLEY (including oats)		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	3.40	.34	2.72	2.72	.34	.34	55	36	31	12	19
	2	3.80	.38	3.04	3.04	.38	.38	Same for all stages				
	3	3.20	.32	2.56	2.56	.32	.32					
	4	2.80	.28	2.24	2.24	.28	.28					
BEANS DRY (including white kidney, light kidney, dark red kidney, and green beans)												
Stage	1	4.20	.42	3.36	3.36	.42	.42	135	36	83	14	42
	2	4.20	.42	3.36	3.36	.42	.42	Same for all stages				
	3	4.20	.42	3.36	3.36	.42	.42					
	4	3.80	.38	3.04	3.04	.38	.38					
CANTALOUPE												
Stage	1	3.80	.38	3.04	3.04	.38	.38	118	53	91	14	32
	2	4.20	.42	3.36	3.36	.42	.42	Same for all stages				
	3	4.00	.40	4.00	4.00	.40	.40					
CARROTS												
Stage	1	3.20	.32	2.56	2.56	.32	.32	84	50	46	27	36
	2	3.20	.32	2.56	2.56	.32	.32	Same for all stages				
	3	3.20	.32	3.20	3.20	.32	.32					
CAULIFLOWER												
Stage	1	3.70	.37	3.00	2.50	.40	.35	135	40	50	14	30
	2	3.70	.37	2.96	2.96	.37	.37	Same for all stages				
	3	4.00	.40	3.20	3.20	.40	.40					
CELERY												
Stage	1	3.80	.38	3.04	3.04	.36	.36	95	36	67	11	34
	2	3.80	.38	3.04	3.04	.38	.38	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
CHERRIES												
Stage	1	2.80	.28	2.24	2.24	.28	.28	75	32	52	19	22
	2	3.30	.33	2.64	2.64	.33	.33	Same for all stages				
	3	2.80	.28	2.24	2.24	.28	.28					
	4	3.00	.28	2.24	2.24	.30	.30					

DESCRIPTION		PERCENT						PARTS PER MILLION				
CHILI		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	3.80	.38	3.04	3.04	.38	.38	220	40	115	18	45
	2	4.20	.42	3.36	3.36	.42	.42	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
CITRUS (including lemons, grapefruit, and tangerines)												
Stage	1	2.40	.24	1.92	1.92	.24	.24	85	34	45	12	36
	2	2.80	.28	2.24	2.24	.28	.28	Same for all stages				
	3	2.60	.26	2.60	2.60	.26	.26					
	4	2.60	.26	2.60	2.60	.26	.26					
CORN (including sweet corn and baby corn)												
Stage	1	3.20	.32	2.56	2.56	.32	.32	95	33	60	12	13
	2	3.80	.38	3.04	3.04	.38	.38	Same for all stages				
	3	3.80	.38	2.40	2.40	.38	.38					
	4	2.00	.20	2.60	2.60	.20	.20					
COSTAL BERMUDA GRASS												
Stage	1	3.00	.30	2.40	2.40	.30	.30	55	23	65	10	7
	2	3.00	.30	2.40	2.40	.30	.30	Same for all stages				
	3	3.00	.30	2.40	2.40	.30	.30					
	4	2.80	.28	2.24	2.24	.30	.30					
COTTON (short staple)												
Stage	1	4.00	.40	3.20	3.20	.40	.40	104	41	48	19	62
	2	4.60	.46	3.68	3.68	.46	.46	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
	4	3.00	.30	2.40	2.40	.30	.30					
COTTON (long staple)												
Stage	1	3.60	.36	2.88	2.88	.36	.36	104	41	48	19	62
	2	3.60	.36	2.88	2.88	.36	.36	Same for all stages				
	3	3.20	.32	2.556	2.56	.32	.32					
	4	3.00	.30	2.40	2.40	.30	.30					

DESCRIPTION		PERCENT						PARTS PER MILLION									
CUCUMBERS		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B					
Stage	1	4.00	.40	3.20	3.20	.40	.40	300	48	85	16	45					
	2	4.40	.44	3.52	3.52	.44	.44	Same for all stages									
	3	4.00	.40	3.20	3.20	.40	.40										
	4	3.60	.36	3.20	3.20	.40	.40										
GARLIC																	
Stage	1	3.80	.38	3.04	3.04	.38	.38	100	50	80	15	25					
	2	4.40	.44	3.52	3.52	.44	.44	Same for all stages									
	3	3.80	.38	3.04	3.04	.38	.38										
	4	3.60	.36	2.88	2.88	.36	.36										
GRAIN SORGHUM																	
Stage	1	3.40	.34	2.72	2.72	.34	.34	80	30	50	90	12					
	2	3.90	.39	3.12	3.12	.39	.39	Same for all stages									
	3	3.40	.34	2.72	2.72	.34	.34										
	4	2.70	.27	2.16	2.16	.27	.27										
GRAPES (including Thompson, Perlette, Red Flames)																	
Stage	1	2.70	.27	2.20	2.20	.27	.27	75	36	70	12	31					
	2	3.00	.30	2.40	2.40	.30	.30	Same for all stages									
	3	2.80	.28	2.60	2.60	.28	.28										
	4	2.40	.24	2.40	2.40	.24	.24										
JOJOBA																	
Stage	1	1.50	.15	1.20	1.20	.15	.15	97	37	29	11	28					
	2	2.00	.20	1.60	1.60	.20	.20	Same for all stages									
	3	1.80	.18	1.44	1.44	.18	.18										
	4	1.80	.18	1.44	1.44	.18	.18										
LETTUCE																	
Stage	1	4.50	.45	3.60	3.60	.45	.45	80	45	120	14	32					
	2	4.60	.46	3.68	2.50	.46	.46	Same for all stages									
MINT (including spearmint)																	
Stage	1	3.90	.39	3.12	3.12	.39	.39						140	42	83	20	25
	2	4.30	.43	3.44	3.44	.43	.43	Same for all stages									
	3	4.30	.43	3.44	3.44	.43	.43										
	4	3.90	.39	3.12	3.12	.39	.39										

DESCRIPTION		PERCENT					PARTS PER MILLION					
OATS		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	3.00	.33	1.70	1.00	.25	.35	55	30	31	12	16
	2	3.00	.33	1.70	1.00	.25	.35	Same for all stages				
	3	3.00	.33	1.70	1.00	.25	.35					
	4	2.50	.33	1.70	1.00	.25	.35					
ONIONS												
Stage	1	3.40	.34	2.72	2.72	.34	.34	90	55	76	16	27
	2	3.80	.38	3.04	3.04	.38	.38	Same for all stages				
	3	3.40	.34	2.72	2.72	.34	.34					
	4	3.10	.31	3.10	3.10	.31	.31					
ORANGES												
Stage	1	2.60	.26	2.08	2.08	.26	.26	130	60	120	15	54
	2	2.60	.26	2.08	2.08	.26	.26	Same for all stages				
	3	2.60	.26	2.08	2.08	.26	.26					
	4	2.60	.26	2.08	2.08	.26	.26					
PEACHES (including Nectarines)												
Stage	1	3.80	.38	3.04	3.04	.38	.38	13	40	55	12	30
	2	3.60	.36	2.88	2.88	.36	.36	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
	4	3.40	.34	2.72	2.72	.34	.34					
PEANUTS												
Stage	1	3.20	.32	2.56	2.56	.32	.32	150	70	50	30	60
	2	4.00	.40	3.20	3.20	.40	.40	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
	4	3.40	.34	2.72	2.72	.34	.34					
PEARS												
Stage	1	3.00	.30	2.40	2.40	.30	.30	89	34	52	13	32
	2	3.30	.33	2.64	2.64	.33	.33	Same for all stages				
	3	2.80	.28	2.24	2.24	.28	.28					
	4	3.00	.30	2.40	2.40	.30	.30					

DESCRIPTION		PERCENT					PARTS PER MILLION					
PEAS		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	3.50	.35	3.00	2.50	.40	.25	150	70	50	30	60
	2	3.50	.35	3.00	2.50	.40	.25	Same for all stages				
	3	3.50	.35	3.00	2.50	.40	.25					
	4	3.50	.35	3.00	2.50	.40	.25					
PECANS												
Stage	1	2.60	.26	2.08	2.08	.26	.26	100	48	115	25	55
	2	3.00	.30	2.40	2.40	.30	.30	Same for all stages				
	3	2.40	.24	1.92	1.92	.24	.24					
	4	3.00	.30	2.40	2.40	.30	.30					
PEPPERS												
Stage	1	4.40	.44	3.52	3.52	.44	.44	245	43	115	17	46
	2	4.40	.44	3.52	3.52	.44	.44	Same for all stages				
	3	4.40	.44	3.52	3.52	.44	.44					
	4	3.80	.38	3.52	3.52	.38	.38					
PISTACHIOS												
Stage	1	2.80	.28	2.24	2.24	.28	.28	89	32	60	11	48
	2	3.30	.33	2.64	2.64	.33	.33	Same for all stages				
	3	3.10	.31	2.48	2.48	.31	.31					
	4	3.00	.30	2.40	2.40	.30	.30					
PLUMS & PRUNES												
Stage	1	3.00	.30	2.40	2.40	.30	.30	110	40	60	15	30
	2	3.40	.34	2.72	2.72	.34	.34	Same for all stages				
	3	2.80	.28	2.24	2.24	.28	.28					
	4	3.00	.30	2.40	2.40	.30	.30					
POTATOES												
Stage	1	5.40	.54	4.32	4.32	.54	.54	135	50	120	18	35
	2	6.00	.60	4.80	4.80	.60	.60	Same for all stages				
	3	4.90	.49	4.80	4.80	.54	.54					
	4	4.00	.40	4.00	4.00	.40	.40					

DESCRIPTION		PERCENT					PARTS PER MILLION					
RADISHES		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	3.20	.30	2.40	2.00	.30	.30	100	40	70	15	26
	2	3.20	.30	2.40	2.00	.30	.30	Same for all stages				
	3	3.60	.32	2.60	2.40	.34	.30					
	4	2.80	.30	2.40	2.40	.30	.30					
RICE												
Stage	1	2.80	.28	2.24	2.24	.28	.28	117	42	52	10	35
	2	3.60	.36	2.88	2.88	.36	.36	Same for all stages				
	3	3.30	.33	2.90	2.90	.33	.33					
	4	2.80	.28	2.80	2.80	.28	.28					
SOYBEANS												
Stage	1	4.40	.44	3.52	3.52	.44	.44	95	39	58	13	41
	2	5.20	.52	4.16	4.16	.52	.52	Same for all stages				
	3	5.20	.52	4.16	4.16	.52	.52					
	4	4.40	.44	3.52	3.52	.44	.44					
SUGAR BEETS												
Stage	1	4.00	.40	3.20	3.20	.40	.40	115	48	90	15	40
	2	4.40	.44	3.52	3.52	.44	.44	Same for all stages				
	3	4.20	.42	3.52	3.52	.42	.42					
	4	3.20	.32	2.56	2.56	.32	.32					
SQUASH												
Stage	1	3.60	.36	2.88	2.88	.36	.36	180	48	90	15	40
	2	4.00	.40	3.20	3.20	.40	.40	Same for all stages				
	3	3.80	.38	3.04	3.04	.38	.38					
	4	3.40	.34	2.72	2.72	.34	.34					
STRAWBERRIES												
Stage	1	3.50	.35	2.80	2.80	.35	.35	115	53	90	14	30
	2	3.50	.35	2.80	2.80	.35	.35	Same for all stages				
	3	3.70	.37	2.96	2.96	.37	.37					
	4	3.50	.35	2.80	2.80	.35	.35					

DESCRIPTION		PERCENT					PARTS PER MILLION					
TANGERINES		N	P	K	Ca	Mg	S	Fe	Zn	Mn	Cu	B
Stage	1	2.60	.35	2.40	3.90	.38	.28	85	34	45	12	36
	2	2.60	.35	2.40	3.90	.38	.28	Same for all stages				
	3	2.60	.35	2.40	3.90	.38	.28					
	4	2.60	.35	2.40	3.90	.38	.38					
TOMATOES												
Stage	1	4.20	.42	3.36	3.36	.42	.42	140	40	145	20	60
	2	4.60	.46	3.68	3.68	.46	.46	Same for all stages				
	3	4.20	.42	3.68	3.68	.42	.42					
	4	3.20	.32	3.20	3.20	.32	.32					
WATERMELON												
Stage	1	4.20	.42	3.36	3.36	.42	.42	140	48	90	16	45
	2	4.20	.42	3.36	3.36	.42	.42	Same for all stages				
	3	4.20	.42	3.36	3.36	.42	.42					
	4	3.80	.38	3.36	3.36	.42	.42					
WHEAT												
Stage	1	4.00	.40	3.20	3.20	.40	.40	63	36	33	10	27
	2	4.50	.45	3.60	3.60	.45	.45	Same for all stages				
	3	4.00	.40	3.60	3.60	.45	.45					
	4	3.20	.32	2.56	2.56	.32	.32					