



A&L CANADA
LABORATORIES INC.

2016 TISSUE SAMPLING REFERENCE GUIDE



Your
Analytical
Experts



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CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
934	Agave Tequilana	MRML		
858	Aguacate (Hass)	MLML new growth		
001	Alfalfa	Top 6"	Top 6 inches prior to flowering	Prior to flowering
004	Alfalfa - Bloom	Top 6"	Wrapper leaf 2-3 months	Bloom
322	Alfalfa for Seed	Tops or top 6"		Early Growth
323	Alfalfa for Seed	Tops or top 6"		Bloom
324	Alfalfa for Seed	Tops or top 6"		Bloom-harvest
127	Apple	Fruit	Harvest	Harvest
123	Apple (Rosette)	Rosette		Rosette
710	Apple - Gala	Fruit	Harvest	Harvest
418	Apple - Golden Delicious	Leaf		Early
518	Apple - Ida Red	Leaf		Early
118	Apple - McIntosh	Leaf		Early
218	Apple - McIntosh Spur	Leaf		Early
618	Apple - Northern Spy	Leaf		Early
318	Apple - Red Delicious	Leaf		Early
221	Apple Fruitlet	Fruitlet	Early	40-50 grams
202	Apple Fruitlet	Fruitlet		30-40 grams
109	Apple Fruitlet	Fruitlet		50-60 grams
110	Apple Fruitlet	Fruitlet		60-70 grams
114	Apple Fruitlet	Fruitlet		70 + grams
836	Apple Fruitlet	Fruitlet		less than 30g
018	Apple Leaf	Recent fully developed leaf	Recent fully developed leaf	Mid Season
718	Apple Leaf	Recent fully developed leaf	Recent fully developed leaf	Early
125	Apple Leaf	Recent fully developed leaf	Recent fully developed leaf	Harvest
700	Apple-Empire	Fruit	Harvest	Harvest
707	Apple-Fuji	Fruit	Harvest	Harvest

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
703	Apple-Golden Delicious	Fruit	Harvest	Harvest
705	Apple-Honey Crisp	Fruit	Harvest	Harvest
708	Apple-IDA Red	Fruit	Harvest	Harvest
706	Apple-McIntosh	Fruit	Harvest	Harvest
704	Apple-Red Delicious	Fruit	Harvest	Harvest
709	Apple-Spy	Fruit	Harvest	Harvest
059	Apricot Canning	Mature leaves from new growth		Summer
173	Apricot Fresh Fruit	Mature leaves from new growth		Summer
408	Artichoke	Most recently developed leaf		June-August
405	Arugula	most recently expanded leaf		Early
406	Arugula	most recently matured leaf		Mid-season
023	Asparagus	Top 20" fronds	Recent fully developed leaf	New growth Mid-season
024	Asparagus	Top 20" fronds	Recent fully developed leaf	Late summer growth
090	Asparagus	Spear		Spring
931	Banana	Mid-Section Leaf Strips (15+)		Harvest
923	Banana	Centre strip across middle of MRML 15.7 cm strip		6-9 month old
060	Barley	Leaf	Upper leaves, prior to bloom	Emergence of head from boot
061	Barley	Leaf		Early - Pre Boot Stage
077	Barley (Top Leaf)	Leaf		Boot Stage
005	Bean - Dry	Recent fully developed leaf	Recent fully developed leaf, prior to flowering	Mid-season
007	Bean - Field			
135	Bean - Kidney	Most Recently developed leaves		Mid season to pod set
335	Bean - Lima	leaf		most recently matured leaf
042	Bean - Snap	Upper Leaf - Mature	Recent fully developed leaf,	Mature Pods
078	Bean - Snap	Recent fully developed leaf	Recent fully developed leaf,	Early growth to first bloom

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
			prior to flowering	
185	Beet - Sugar - Early	Leaves		Young plants 0-60 days
015	Beet - Sugar - Mid Season	Recent fully developed leaf	Center leaf, fully developed, mid season	Pre-Bulking
352	Beet - Sugar Petiole	Petiole		EARLY TO MID SEASON
451	Beet - Table	Youngest Mature Leaf Blade		Young to Bulb Forming
452	Beet - Table	Most recently matured leaf		Pre-Bulking (late summer)
453	Beet - Table	Most Recently Matured Leaf		Mid-growth (root dev'p 4-6cm)
532	Black Bean	Most recently matured leaflet		Mature pod set to harvest
533	Black Bean	Most recently matured leaflet		emergence to bloom
551	Black Walnut	Most recently matured leaflet		
863	Blackberry	Most recently matured leaflet		Early - flowering
864	Blackberry	Most recently matured leaflet	2-3 weeks post harvest from mid section of prima cane	
835	Blueberries	Fruit		Mature
021	Blueberry	Leaf from current shoot growth	Recent fully developed leaf	Post bloom
207	Blueberry	Leaf from current shoot growth 4 th – 6 th node from tip		Pre-bloom
208	Blueberry	Leaf from current shoot growth		Post-bloom harvest
223	Blueberry	Leaf from current shoot growth		Post harvest
853	Blueberry	Immature fruit		5-7
854	Blueberry	Immature fruit		7-14
855	Blueberry	Immature fruit		14-20
865	Rabbit eye blueberry	Youngest full sized leaf from fruiting shoots	4 th -6 th node from the shoot tip	Bloom to harvest
413	Blueberry - Low Bush	Most Recently Matured Leaf	4 – 5 inches new growth	Early
414	Blueberry - Low Bush	Top 4-5 Inches - MRML		Bloom
800	Bok Choy			MRML
220	Borage	Youngest fully developed leaf		Pre-Flower

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
008	Broccoli	Leaf		Mature
448	Broccoli	Leaf	Early to pre heading	2 - 6 Weeks
449	Broccoli	Leaf		6 - 12 Weeks
450	Broccoli	Leaf	Heading	12 Weeks to Mature
353	Brome Grass	First fully developed stem with leaves		Mid Growth
419	Brome Grass	top		between clippings
009	Brussel Sprouts	Leaf		Mid-Season mature
470	Brussel Sprouts	leaf		Early sprout initiation
439	Buckwheat	Mature Leaves		Flowering
011	Cabbage	Wrapper Leaf		Mature - harvest
111	Cabbage	Whole Plant		2-6 Weeks Old
211	Cabbage	Wrapper Leaf		2-3 Months Old
106	Cabbage	Mature leaves from new growth		Heads beginning to form
107	Cabbage	Whole plant		8 leaf stage
108	Cabbage	Wrapper leaf		heads forming to mature
386	Cabbage	Outside part of cabbage		Mature cabbage out of storage
338	Canary Seed	leaf		most recently matured leaf
334	Canola	Upper matured leaf blades prior to flowering		seedling to bud development
466	Canola	MRML		Buds visible to Pre-flower
075	Canola	Most recently matured leaf 5 th from the top		Pre-flower to 50% flower
076	Canola	Upper whole plant	Whole plant	50% plus flowering to harvest
151	Cantaloupe	Recent fully developed leaf	5 th leaf from tip	Flower start to small fruit
152	Cantaloupe	Recent fully developed leaf	5 th leaf from tip	Small fruit to harvest
421	Cantaloupe-Muskmelon	MRML		12" vine to flowering
022	Carrot	Recent fully developed leaf	Recent fully developed leaf	Mid-season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
020	Carrot	most recent matured leaf		Mature
112	Carrot	Whole tops		Early emergence to 1-3 cm root
222	Carrot - Baby Carrot Root	Root		Early
122	Carrot - Mature Root	Root		Mature
025	Cauliflower	Recent fully developed leaf	Recent fully developed leaf	At heading
115	Cauliflower	Whole top part of plant		Early growth to pre-heading
116	Cauliflower		Recent fully developed leaf	12 week to mature
119	Celery	Blade and petioles	Top 6 inches of stalk	Early emerge to 6 weeks
120	Celery	Petioles from most recently mature leaves	Youngest mature leaf	Half grown to maturity
027	Cherry	Leaf from midshoot current growth	Recent fully developed leaf	Mid-season
121	Cherry	First Fully mature leaf on new wood spring		Spring Early
051	Cherry - Sweet	Most recently matured leaf		Summer
239	Chickpea	Most recently matured leaf		Pre-flowering
530	Chinese Broccoli	Most recently matured leaf		midseason
531	Chinese Broccoli	Whole plant		8 leaf stage
113	Chinese Cabbage	Wrapper Leaves		Heading
403	Chinese Cabbage	first fully developed leaf		8 leaf stage
535	Chinese Celery	Most recently matured leaf		Midseason to harvest
536	Chinese Celery	Most recently matured leaf		Early to Midseason
225	Chinese Greens	Leaves from fully expanded new leaves		Mid Grown to Mature
425	Chinese Kale	MRML		8 leaf stage
428	Chinese Kale	MRML		midseason
226	Chinese Mustard Greens	Most Recently fully dev'd blades		Mid Grown
526	Chinese Parsley Cilantro	most recently matured leaf		Mid-season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
527	Chinese Parsley Cilantro	most recently expanded leaf		Early
388	Chinese Radish	Most recently matured leaf		Tuber half grown to mature
389	Chinese Radish	Most recently matured leaf		Seedling to bulb half grown
422	Chinese spinach	MRML		midseason
176	Clover	MRML		Mature
301	Clover	MRML		Early bloom
232	Collards	Most recently matured leaf		Mid-season -Mature
163	Collards	Most recently matured leaf		Early
002	Corn	Whole plant	Whole plant (<18") V2-V6	Less than 12 inches
103	Corn Leaf (Early)	Leaf	early growth V6-VT	early growth
003	Corn	Ear leaf	Ear leaf, at silking R1-R2	Silking (Bloom)
203	Corn Leaf (Fruit)	Leaf	Silking R3-R4	silking
303	Corn Leaf (Mature)	Ear Leaf	R4-R6	Mature
099	Corn	Grain	Grain	After black layer
124	Corn grain			Mature harvested grain
054	Corn	Stalk segment	Stalk segment	After black layer
310	Corn - Sweet	Unfurled leaf, 5th from tip		7-8 weeks, tassel start
460	Corn - Sweet	Whole Plant		6-10" Tall
461	Corn - Sweet	Most Recent Mature Leaf		10-15" Tall
462	Corn - Sweet	Unfurled leaf, 5th from tip		7-8 weeks, tassel start
463	Corn - Sweet	Unfurled leaf, 5th from tip (8+)		Full tassel to silk start
464	Corn - Sweet	Unfurled leaf, 5th from tip (8+)		End of silk
345	Corn RR	Whole Plant		Less than 12"
346	Corn RR	Recent fully developed leaf		Prior to tasseling
347	Corn RR	Recent fully developed leaf		Silking
067	Cranberry	New shoots	New shoots	Mid-season
465	Cucumber	MRML	Early 3-4 leaf stage –to early flower	

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052	Cucumber	5th leaf from tip (20+)	Omit unfurled leaf	Flower Bud to Small Fruit
128	Cucumber	Recent fully developed leaf	Recent fully developed leaf	Small fruit to harvest
053	Cucumber - European	12 leaf blades wit midribs	5 th full leaf from tip	Mid Season Flowering to Harvest
416	Current -black	most recently matured leaf		fruit - ripening
162	Eggplant	Recent fully developed leaf	Recent fully developed leaf	Small fruit to harvest
803	Endive	Oldest mature leaf		Early 8 leaf stage
804	Endive	Oldest Mature Leaf		Maturing
409	Fababean	Recent fully developed leaf	Recent fully developed leaf, at early bloom	Early Bloom
410	Fababean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering	Early
411	Fababean	Recent fully developed leaf		Fruiting
412	Fababean	Recent fully developed leaf		Full Bloom
407	Fescue - tall	most recently matured leaf		mid-season
552	Flax	Whole plant		Early growth
062	Flax	Leaf	upper 3rd blossom	
030	Flower	Most recently developed leaf		
319	Flower - Annual Dianthus	Mature leaves from new growth		Survey ranges mature plant greenhouse
201	Flower - Begonia	Most recently developed leaf	Most recently matured leaf	
133	Flower - Carnations	Recent fully developed leaf		All season
204	Flower - Chrysanthemum	Recent fully developed leaf	4th leaf from tip	Bud start to harvest
171	Flower - Chrysanthemum	4th leaf from tip (30+)		Prior to Bud Start
175	Flower - Daylily	Mature leaves from new growth		Summer
206	Flower - Gerbera Daisy	Recent fully developed leaf (20+)		Mid-Season
205	Flower - Gladiolus	Recent fully developed leaf (15+)		Mid-Season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
325	Flower - Hibiscus	Most Recent Fully Developed Leaf		Mid-season
187	Flower - Hydrangea	Most recently matured leaf		
383	Flower - Impatiens - Bed	Most Recently Matured Leaf		Mature Plants
384	Flower - Impatiens - NG	Most Recently Matured Leaf		Mature Plant
130	Flower - Lily	Leaf		Mature
329	Flower - Lupins	Most recently developed leaf		pre flower
182	Flower - Poinsettia	Most recently developed leaf		
045	Flower - Rose	Recent fully developed leaf	Recently developed compound 5-leaflet leaf	Mid-season
271	Flower - Snap Dragon	Leaves	Leaves - New Growth	
420	Flowering Crab apple	30-40 leaves from new growth		Midseason
519	Frazer Fir	Terminal Cuttings (2-3") from 25 trees		Most recently mature foliage in upper
080	Garlic	Leaf no white portions of blub		Pre-bulbing
136	Garlic	Leaf no white portions of blub		Bulbing
137	Garlic	Leaf no white portions of blub		Post-bulbing
102	Ginseng	Leaf	Mature leaf	
534	Ginseng	Root		Root dry weight ranges
302	Ginseng Root	Root		2-3 Year
304	Ginseng Root	Root		4-6 Year
158	Grain Sorghum	Recent fully developed leaf	Recent fully developed leaf, prior to flowering	Prior to flowering
168	Grain Sorghum	3rd leaf below head	Recent fully developed leaf	Prior to bloom
169	Grain Sorghum	Whole plant	Seedling (<6 inches)	Less than 6 inches
170	Grain Sorghum	Recent fully developed leaf	Recent fully developed leaf	6 inches to bloom stage
087	Grape	Leaf blade opposite basal cluster		Pre-Bloom
096	Grape	Blade MRML		Bloom-Post Bloom

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238	Grape	Blade MRML		Post Bloom
031	Grape	Blade MRML	Recent fully developed leaf	Mid-season
094	Grape	Blade MRML	Ripening	Ripening
089	Grape Petiole - Flowering	Petiole		Flowering to Veraison
032	Grape Petiole	Petiole opposite basal flower clusters	Petiole	Post-Bloom
034	Grape	Most recently matured leaf blade		Mid- to late summer
132	Grape Petiole	Petiole opposite basal flower clusters	Petiole	Ripening
138	Grape Petiole	Petiole		Pre-Harvest
071	Grapefruit	Mature leaves from new growth (25+)		Mid-Season
006	Grass			
801	Handle			
811	Harvest Grain			
339	Hemp	10 stems (10 cm section 1m from tip plus		mature mid summer
029	Herb - Chive	Recently fully developed leaf (40+)		Mid-Season
035	Herb - Mint	Recent fully developed leaf	Recent fully developed leaf	Mid-season
070	Herb - Parsley	Most Recently Matured Leaf		New growth May June
316	Herbs	Most Recently Matured Leaf		New growth May June
852	Hops	Most Recently Matured Leaf		Mid Season
145	Horseradish	12 Blades w/midribes		Through growing season
233	Kale	Most recently matured leaf		Mid-season
915	Kidney Beans	MRML	Mid season pod set	midseason
084	Kiwi	Recent fully developed leaf (30+)		Mid-Season
807	Leeks	Most Recently Matured Leaf		Mid Season (Aug - Sept)
047	Lemon	Mature leaves from new		Mid-Season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
		growth (30+)		
146	Lentils	Uppermost Mature Leaf		Early flowering
215	Lentils	Whole Plant		Early Growth
043	Lettuce	Wrapper leaf	Recent fully developed leaf	Mature
148	Lettuce - Boston	Oldest leaf	Recent fully developed leaf	8 leaf stage
382	Lettuce - Leaf	Oldest leaf	Recent fully developed leaf	up to 8 leaf stage
385	Lettuce - Leaf	Most recently matured leaf		8 leaf to harvest
143	Lettuce - Romaine	MRML		8 leaf stage
147	Lettuce - Romaine	Wrapper Leaf		Mature leaf
469	Head lettuce	Wrapper leaf		Heads ½ size
468	Head lettuce	Wrapper leaf		Mature
160	Lime	Mature leaves from new growth (30+)		Mid-Season
328	Linola	upper 3rd from top of plant		at budding onset of blossom
044	Melon	Recent fully developed leaf	Recent fully developed leaf	Flower start to small fruit
474	Millet	Whole plant		early
337	Millet	leaf		
336	Mustard	leaf	MRML	Midseason
142	Nectarines	MRML	On new growth	Spring early to fruit set
153	Nectarines	MRML	Fruit 2 inch in dia	Mid-season
010	Oats	Flag leaf	Upper leaves, prior to bloom	Head emergence from boot
104	Oats	Whole Plant Leaves		Whole Plant 5-8 cm
105	Oats	Recent fully developed leaf	Boot Stage	Boot Stage
074	Okra	Recently fully developed leaf (12+)		Early flowering
083	Olive	Leaf from new growth (50+)		Mid-Season
426	Onion	Bulb	Bulb	Harvest
154	Onion	Tops no white		1/3 - 1/2 growth
155	Onion	Tops no white		Mature pre-bulking

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
037	Onions	Whole plant		2-6 leaf stage-from 2leaf to bulb forming
040	Orange	Mature leaves from new growth		Mid-Season
069	Orchard Grass	top		between clippings
805	Orchid	Most Recently Matured Leaf		Mature Plants Flowering Stage
806	Orchid	Most Recently Matured Leaf		Young Plant Non Flowering
209	Pak Choi	MATURE LEAVES		ALL SEASON
528	Parsley	most recently matured leaf		Mid-season
529	Parsley	most recently expanded leaf		Early
178	Parsnip	Recent fully developed leaf		Mid-season
537	Parsnip	Root		Mature root
240	Passion Fruit	Most recently matured leaf from lateral shoots		Mid-season
033	Pasture Grass			
321	Pea - Field	Recently matured leaf		Pod set to harvest
320	Pea - Field	Recently matured leaf		First Bloom
041	Peach	Recent fully developed leaf	Recent fully developed leaf	Mid-season
856	Peach	Fruit		
141	Peach	Leaves (Spring To Fruit Set)		Early
349	Peanut	Recent fully developed leaf		Pre-Flowering
351	Peanut	most recently matured leaf		pegging to mature
348	Peanut	Recent fully developed leaf		25-30 days after emergence
161	Pears	Recent fully developed leaf	Recent fully developed leaf	Early to Mid-Season
832	Pears	Fruit		
039	Peas	Whole Plant	Early	First bloom
179	Peas	Recent fully developed leaf	Recent fully developed leaf	Pre-bloom
180	Peas	Recent fully developed leaf		Mature
219	Peas	Whole Plant		Early
228	Peas - Snow or Sugar	Most Recently Expanded Leaf		Mid-Season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
101	Pecan	Leaf from mid-portion (25+)		Mid-Season
012	Pepper sweet bell	Most recent matured leaf	Early Fruit set	Early fruit set
038	Pepper - Early	Recent fully developed leaf	Recent fully developed leaf	First bloom to early fruit set
343	Pepper - Sweet	Most Recently Matured Leaf		Early Harvest
344	Pepper - Sweet	Most Recently Matured Leaf		Seedling to Prior to Blossoming
473	Pepper – chili	Most Recently Matured Leaf		Early to pre-bloom
472	Pepper - chili	Most Recently Matured Leaf		Bloom to harvest
809	Peppers	Fruit		
525	Persimmon			MRML new growth summer
475	Pistachio	Leaflets from leaves midway along non-bearing branches centre strip of first fully developed leaf		Mid-season to harvest
315	Plantain			mature
036	Plum	Recent fully developed leaf	Recent fully developed leaf	Mid-season
016	Potato	Recent fully developed leaf	Leaves - mid season	Mid season
073	Potato	Tuber	Tuber	Mature
216	Potato	Leaf	Leaves - early	early
183	Potato	Golf ball size tubers		Tuberet analysis
244	Potato	30+ Petioles (4th from top)		30 days after emergence
277	Potato	30+ Petioles (4th from top)		40 days after emergence
255	Potato	Petiole (4th from top of plant) 30+		50 days After Emergence
274	Potato	Petiole (4th from top of plant) 30+		60 days After Emergence
287	Potato	Petiole (4th from top of plant) 30+		110+ days After Emergence tuber bulking
298	Potato	Petiole (4th from top of plant) 30+		70 days After Emergence
313	Potato	Petiole (4th from top of plant)		80-110 days After Emergence tuber bulking
297	Potato	Petiole (4th from top of plant) 30+		70-80 days After Emergence tuber development

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
810	Potato	Tuber		Tuber
224	Potato - Sweet	Most Recent Fully Developed Leaf		
245	Potato Atlantic	30+ Petioles (4th from top)		30 days after emergence
278	Potato Atlantic	30+ Petioles (4th from top)		40 days after emergence
257	Potato Atlantic	Petiole (4th from top of plant) 30+		50 days After Emergence
288	Potato Atlantic	Petiole (4th from top of plant) 30+		60 days After Emergence
299	Potato Atlantic	Petiole (4th from top of plant) 30+		70 days After Emergence
356	Potato Atlantic	Petiole (4th from top of plant) 30+		80 days After Emergence
365	Potato Atlantic	Petiole (4th from top of plant) 30+		90-110 days After Emergence
374	Potato Atlantic	Petiole (4th from top of plant) 30+		110+ days After Emergence
248	Potato Kennebec	30+ Petioles (4th from top)		30 days after emergence
279	Potato Kennebec	30+ Petioles (4th from top)		40 days after emergence
258	Potato Kennebec	Petiole (4th from top of plant) 30+		50 days After Emergence
289	Potato Kennebec	Petiole (4th from top of plant) 30+		60 days After Emergence
300	Potato Kennebec	Petiole (4th from top of plant) 30+		70 days After Emergence
355	Potato Kennebec	Petiole (4th from top of plant) 30+		80 days After Emergence
364	Potato Kennebec	Petiole (4th from top of plant) 30+		90-110 days After Emergence
373	Potato Kennebec	Petiole (4th from top of plant) 30+		110+ days After Emergence
246	Potato Norkota	30+ Petioles (4th from top)		30 days after emergence
280	Potato Norkota	30+ Petioles (4th from top)		40 days after emergence
259	Potato Norkota	Petiole (4th from top of plant) 30+		50 days After Emergence

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
290	Potato Norkota	Petiole (4th from top of plant) 30+		60 days After Emergence
305	Potato Norkota	Petiole (4th from top of plant) 30+		70 days After Emergence
358	Potato Norkota	Petiole (4th from top of plant) 30+		80 days After Emergence
367	Potato Norkota	Petiole (4th from top of plant) 30+		90-110 days After Emergence
376	Potato Norkota	Petiole (4th from top of plant) 30+		110+ days After Emergence
247	Potato Norland	30+ Petioles (4th from top)		30 days after emergence
281	Potato Norland	30+ Petioles (4th from top)		40 days after emergence
260	Potato Norland	Petiole (4th from top of plant) 30+		50 days After Emergence
291	Potato Norland	Petiole (4th from top of plant) 30+		60 days After Emergence
306	Potato Norland	Petiole (4th from top of plant) 30+		70 days After Emergence
357	Potato Norland	Petiole (4th from top of plant) 30+		80 days After Emergence
366	Potato Norland	Petiole (4th from top of plant) 30+		90-110 days After Emergence
375	Potato Norland	Petiole (4th from top of plant) 30+		110+ days After Emergence
252	Potato Onaway	30+ Petioles (4th from top)		30 days after emergence
282	Potato Onaway	30+ Petioles (4th from top)		40 days after emergence
261	Potato Onaway	Petiole (4th from top of plant) 30+		50 days After Emergence
292	Potato Onaway	Petiole (4th from top of plant) 30+		60 days After Emergence
307	Potato Onaway	Petiole (4th from top of plant) 30+		70 days After Emergence
362	Potato Onaway	Petiole (4th from top of plant) 30+		80 days After Emergence
371	Potato Onaway	Petiole (4th from top of plant) 30+		90-110 days After Emergence

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
380	Potato Onaway	Petiole (4th from top of plant) 30+		110+ days After Emergence
243	Potato Petiole	30+ Petioles (4th from top)		70 - 80 days after emergence
283	Potato R. Burbank	30+ Petioles (4th from top)		40 days after emergence
262	Potato R. Burbank	Petiole (4th from top of plant) 30+		50 days After Emergence
293	Potato R. Burbank	Petiole (4th from top of plant) 30+		60 days After Emergence
308	Potato R. Burbank	Petiole (4th from top of plant) 30+		70 days After Emergence
369	Potato R. Burbank	Petiole (4th from top of plant) 30+		90-110 days After Emergence
360	Potato R. Burbank	Petiole (4th from top of plant) 30+		80 days After Emergence
378	Potato R. Burbank	Petiole (4th from top of plant) 30+		110+ days After Emergence
249	Potato Shepody	30+ Petioles (4th from top)		30 days after emergence
284	Potato Shepody	30+ Petioles (4th from top)		40 days after emergence
263	Potato Shepody	Petiole (4th from top of plant) 30+		50 days After Emergence
294	Potato Shepody	Petiole (4th from top of plant) 30+		60 days After Emergence
309	Potato Shepody	Petiole (4th from top of plant) 30+		70 days After Emergence
359	Potato Shepody	Petiole (4th from top of plant) 30+		80 days After Emergence
377	Potato Shepody	Petiole (4th from top of plant) 30+		110+ days After Emergence
368	Potato Shepody	Petiole (4th from top of plant) 30+		90-110 days After Emergence
251	Potato Snowden	30+ Petioles (4th from top)		30 days after emergence
285	Potato Snowden	30+ Petioles (4th from top)		40 days after emergence
264	Potato Snowden	Petiole (4th from top of plant) 30+		50 days After Emergence
295	Potato Snowden	Petiole (4th from top of plant)		60 days After Emergence

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
		30+		
311	Potato Snowden	Petiole (4th from top of plant) 30+		70 days After Emergence
379	Potato Snowden	Petiole (4th from top of plant) 30+		110+ days After Emergence
361	Potato Snowden	Petiole (4th from top of plant) 30+		80 days After Emergence
370	Potato Snowden	Petiole (4th from top of plant) 30+		90-110 days After Emergence
379	Potato Snowden	Petiole (4th from top of plant) 30+		110+ days After Emergence
253	Potato Superior	30+ Petioles (4th from top)		30 days after emergence
286	Potato Superior	30+ Petioles (4th from top)		40 days after emergence
265	Potato Superior	Petiole (4th from top of plant) 30+		50 days After Emergence
296	Potato Superior	Petiole (4th from top of plant) 30+		60 days After Emergence
312	Potato Superior	Petiole (4th from top of plant) 30+		70 days After Emergence
363	Potato Superior	Petiole (4th from top of plant) 30+		80 days After Emergence
372	Potato Superior	Petiole (4th from top of plant) 30+		90-110 days After Emergence
381	Potato Superior	Petiole (4th from top of plant) 30+		110+ days After Emergence
812	Potato Tuberette	Golf ball size tubers		
159	Pumpkin	Recent fully developed leaf	Recent fully developed leaf	Mid-season
046	Radish	Recent fully developed leaf	Recent fully developed leaf	Seedling to half grown
254	Radish	Most recently matured leaf		Tuber half grown to mature
387	Radish	Most recently matured leaf		Seedling to bulb half grown
065	Raspberry	Recent fully developed leaf	Recent fully developed leaf	Flower bud start
234	Raspberry	Most recently matured leaf		2-3 weeks postharvest
237	Rhubarb	Leaf		Mid-season

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
165	Rice	Recent fully developed leaf	Upper leaves, prior to bloom	Panicle initiation
859	Rice	MRML Y leaf		Panicle initiation
860	Rice	Whole plant		Early growth tillering 30 DAT
861	Rice	Flag leaf		flowering
862	Rice	MRML		Mid tillering
057	Rye	25 Whole Tops		Panicle Initiation
404	Rye Grass	whole tops		Vegetative
172	Saskatoon Berries	Leaves		In Season
831	Seed			
131	Shrub - Alstromeria	Leaf		Mature
230	Shrub - Boxwood (Common)	Terminal Cuttings		Summer
200	Shrub - Euonymus	Terminal Cuttings		Container Production
199	Shrub - Euonymus (Var.)	Terminal Cuttings		Summer
134	Shrub - Evergreen	Leaf		
091	Shrub - Yews	Recent fully developed leaf	Recent fully developed leaf	Mid-season
430	Soybean	Whole Plant	V2-V6	Seedling
117	Soybean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering V6-R1	Early
217	Soybean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering R1	Early Bloom
317	Soybean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering R2	Full Bloom
417	Soybean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering R3-R5	Fruiting
517	Soybean	Recent fully developed leaf	Recent fully developed leaf, prior to flowering R6-R8	Mature
340	Soybean RR	Recent fully developed leaf		Prior to flowering
341	Soybean RR	Recent fully developed leaf		Early Bloom
342	Soybean RR	Recent fully developed leaf		Prior to Pod set

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
048	Spinach	Recent fully developed leaf	Recent fully developed leaf	Mature
184	Spinach	Recent fully developed leaf	Recent fully developed leaf	Young plants 30-50 days
241	Spinach	Leaf		8 weeks spring
242	Spinach	Leaf		8 weeks fall
049	Squash	Recent fully developed leaf	Recent fully developed leaf	Mid-season
050	Strawberry	Recent fully developed leaf	Recent fully developed leaf	Flowering
250	Strawberry	Leaf		Mid Season
150	Strawberry	Recent fully developed leaf	Recent fully developed leaf	Renovation
350	Strawberry	Recent fully developed leaf	Recent fully developed leaf	Early Spring
550	Strawberry	Day neutral	Recent fully developed leaf	
423	Sugar Beet	MRML		6 weeks after planting-early growth
902	Sugar Cane	Leaf	Leaf #3-4 from top mid rib removed	3-5 months old
901	Sugar Cane	Leaf	Leaf #4-6 from top mid rib removed	June
905	Sugar Cane	Leaf	Leaf #4-6 from top mid rib removed	summer
079	Sunflower	Recent fully developed leaf	Recent fully developed leaf	Mid-season
196	Sunflower	Recent fully developed leaf		Budding to Maturity
354	Swiss Chard	Most recently matured leaf		Midseason
174	Tangerine	Mature leaves, subtending fruit		5-7 months into growing season
500	Timothy	Whole Tops		Between clippings
520	Timothy	Most recently matured leaf		5-Heads emerged
521	Timothy	Most recently matured leaf		4-Head beginning to emerge
522	Timothy	Most recently matured leaf		3-Early Growth to flag leaf
523	Timothy	Most recently matured leaf		2-Early Growth 12"+ before flag
524	Timothy	Most recently matured leaf		1-Early Growth 4-12" before flag
014	Tobacco	Recent fully developed leaf	Recent fully developed leaf	Bloom stage
177	Tobacco	Recent fully developed leaf	Flue	60-80 days after planting
275	Tobacco	Leaf		Flue 30 - 45 days after planting

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
276	Tobacco	Leaf		Pre-Harvest - Harvest
186	Tobacco			45-60 days after planting
227	Tobacco			80 days - Mature
330	Tobacco	Most Recently Matured Leaf		Seedling
332	Tobacco	Most Recently Matured Leaf		Flowering
333	Tobacco	Most Recently Matured Leaf		Mature
331	Tobacco - Burley and Dark	Most Recently Matured Leaf		Early Growth
331	Tobacco - Burley and Dark	Most Recently Matured Leaf		Early Growth
149	Tobacco - Flue Cured	Most Recently Matured Leaf		Seedling
056	Tomato	Recent fully developed leaf	Recent fully developed leaf	Mid-season
157	Tomato-processing	Petiole	Recent fully developed leaf	2nd Stage
156	Tomato-processing	Petiole	Recent fully developed leaf	1st Stage
188	Tomato-processing	Petiole		3rd stage
189	Tomato-processing	Petiole of recent fully developed leaf	Late season sizing to 50% ripe	4th stage
068	Tomato	Most Recently Matured Leaf		Early leaf non flowering
808	Tomato	Fruit		
256	Tomato - Greenhouse	Most recently mature leaf, with petiole		Early
144	Tomato - Greenhouse	Most recently mature leaf, with petiole		Mature Plant
326	Tomato - Greenhouse	Most recently mature leaf, with petiole		Before Fruiting
327	Tomato - Greenhouse	Most recently mature leaf, with petiole		During Fruiting
267	Tomato - Stake	12 petioles opposite or below first flower cluster		Mid Bloom first cluster
268	Tomato - Stake	12 petioles opposite or below 2nd flower cluster		Mid Bloom 2nd cluster
269	Tomato - Stake	12 petioles opposite or below 3rd flower cluster		Mid Bloom 3rd cluster

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270	Tomato - Stake	12 petioles opposite or below 4th flower cluster		Mid Bloom 4th cluster
272	Tomato - Stake	12 petioles opposite or below 5th flower cluster		Mid Bloom 5th cluster
273	Tomato - Stake	12 petioles opposite or below 6th flower cluster		Mid Bloom 6th cluster
231	Tree - Balsa Fir	25 2-3" Terminal Cuttings		
100	Tree - Balsam Fir	Terminal Cuttings (2-3") from 25 trees		2-5 years
095	Tree - Birch	Recently mature leaves (25+)		Mid Season
229	Tree - Black Ash	Mature Leaves from New Growth		Summer
266	Tree - Blue Spruce	Needles 1 pint from new growth		Mid-season
055	Tree - Coniferous	Terminal Cuttings (2-3") from 25 trees	Coniferous	
058	Tree - Deciduous	Most recently matured leaf	Deciduous	
402	Tree - Douglas Fir	Terminal Cuttings (2-3") from 25 trees		2-5 years
235	Tree - Elm	Most recently matured leaf		Field production
213	Tree - Juniper (Creeping)	25 2-3" Terminal Cuttings		Summer
236	Tree - Linden / Basswood	10 Mature leaves from new growth		New Growth - Summer
126	Tree - Magnolia	Leaves		All Season
098	Tree - Maple	Recent fully developed leaf	Recent fully developed leaf	Mid-season
314	Tree - Northern Catalpa	5 mature leaves from new growth summer		5 mature leaves from new growth
097	Tree - Oak	Recent fully developed leaf	Recent fully developed leaf	Mid-season
833	Tree - Pine - Jack	Current year needles	Recent fully developed leaf	Mid-season - Young
834	Tree - Pine - Red	Current year needles	Recent fully developed leaf	Mid-season - Young
093	Tree - Pine - White	Current year needles	Recent fully developed leaf	Mid-season - Young
166	Tree - Pine - White	Terminal cuttings (2-3") from 25 trees		Mature tree - mid season

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167	Tree - Poplar	Most recently matured leaf	Recent fully developed leaf	Field production
092	Tree - Walnut	Recent fully developed leaf	Recent fully developed leaf	Mid-season
212	Tree - White Cedar	25 2-3" Terminal Cuttings		Summer
072	Tree - White Spruce	25 2-3" terminal cuttings		summer
501	Triticale	Whole Tops		
066	Turf	Recent fully developed leaf	Leaves	Mid-season
063	Turf - Bent grass Green	clippings	Bent grass Green	
139	Turf - Bent grass Green	clippings		New growth clippings
064	Turf - POA Green	clippings	Poa Green	
140	Turf - POA Green	clippings		New growth clippings
504	Turnip	Leaf		
390	Turnip	Most recently matured leaf		8 weeks to harvest
391	Turnip	Most recently matured leaf		up to 8 weeks
850	Turnip	Petiole		Less than 200g
851	Turnip	Petiole		greater than 200g
415	Vetch	Most Recently Matured Leaf		Prior to Flowering
190	Watermelon	5th leaf from tip		Flower to small fruit
191	Watermelon	5th leaf from tip		Small fruit to harvest
013	Wheat	Recent fully developed leaf	Upper leaves, prior to bloom	Prior to heading
086	Wheat - Spring	All above ground plant parts		Early
397	Wheat - Spring	All above ground plant parts		GS 3
398	Wheat - Spring	All above ground plant parts		GS 4-6
399	Wheat - Spring	Most recently matured leaf		GS 7-8
400	Wheat - Spring	Most recently matured leaf		GS 9-10
401	Wheat - Spring	Most recently matured leaf		GS 10
085	Wheat - Spring	Upper Leaves		Heading to Mature
192	Wheat - Winter	Whole Plant		Seeding - fall

CRP NO	CROP NAME	PLANT PART	DESCRIPTION	GROWTH STAGE
081	Wheat - Winter	Whole Plant		Early
392	Wheat – Winter Hard	All above ground plant parts		GS 3
393	Wheat – Winter Hard	All above ground plant parts		GS 4-6
394	Wheat – Winter Hard	Most recently matured leaf		GS 7-8
395	Wheat – Winter Hard	Most recently matured leaf		GS 9-10
396	Wheat – Winter Hard	Most recently matured leaf		GS 10
467	Winter Wheat Soft	Top two leaves		At heading
193	Wheat – Winter Soft	Upper Leaf		Heading to mature
081	Wheat - Winter	Whole Plant		Early
197	Winter Wheat	Whole plant		April – May 30
082	Winter Wheat	MRML		Pre-bloom May 30 – boot stage
198	Winter Wheat	MRML		Heading to Mature
194	Wheat – Winter Soft			Mature grain
214	Wheatgrass (Crested)	Tops Cut 2cm above Soil		Late Spring
210	Yow Chow	Mature Leaves		All Season
195	Zucchini	Most recently matured leaf		Flowering to harvest
424	mustard greens	MRML		midseason

