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### Sampling instructions for plant sap:

<u>Part of the plant</u> – For sampling, take the **youngest, fully developed leaf** from the top of the plant. This is typically the 3<sup>rd</sup> or 4<sup>th</sup> leaf down from the top. Also take the **oldest, vital leaf** from the very bottom. Stay away from the edges of the field.

<u>Location</u> – Avoid the outer rows of the field. Take into account the sunny and shady side of the plant. Consistency is very important.

<u>Deficiencies</u> - If one area of the field shows deficiencies, sample separate "young" and "old" leaves so a separate analysis can be performed.

<u>Storing and shipping</u> – Keep both "young" and "old" leaf separate. Store in a medium (sandwich sized) ziplock bag. Be sure the bag is closed and not exposed to air. Label the "young" and "old" leaf bags.

<u>Time of sampling</u> - Morning and late evening is best as there will be proper leaf tension. Avoid later parts of the afternoon.

<u>Cost</u> - \$40 for the "young" leaf and \$40 for the "old" leaf. Total of \$80.



## **Potato sampling**

Collect approximately
40 "young" and "old"
leaves or 150 g.
Begin with sampling
after emergence, 1<sup>st</sup>
time before the rows are
closed. Sample every 3 to
4 weeks until
the "bulking up" stage.



# **Canola sampling**

- Sample size will be sufficient with 150 g of each "young" and "old" leaf.

- Begin sampling when there are 4-5 leaves

- Avoid the outer edges and the last 10 yards of a row.

- Always consistently sample the same sides of the plant (sunny or shady).

# Sampling Guide – Wheat and Barley

For wheat and barley, during the tillering growth stage you can sample leaves from the base of the plant. This will be your young leaf. When the crop is in the stem extension growth stage, you can then begin sampling both the young and old leaves separately.



### Time of sampling

- In the tilling stage, wait until plant is 20 cm tall before sampling. The stem extension period is ideal for results.

#### Sample size

- There will be enough sample when a sandwich sized ziplock bag is <u>full</u>. Approximately 2-3 cups

### <u>Beans</u>

- Begin sampling when the plant has at least 5 leaves, every two or three weeks. For ideal results, collect samples before 9am as leaf tension will be better.
- Collect approximately 25 leaves or 150 grams of each "young" and "old" leaves. Store in a ziplock sized bag and keep each "young" and "old" leaf separate.



# <u>Forage</u>

Cut all forage samples just above the root and place in a medium sized ziplock bag. Be sure the bag is full. Allow the plant to grow approximately 1 foot in height before sampling. Earlier to mid season growth stage is best for results.







Collect a sample size of 3.0 ounces or more for each the "young" and "old" leaf. Store in separate ziplock bags and label each.

## <u>Corn</u>



#### Sample plan:

- Begin when plant has 5 or 6 leaves
- Sample before and after flowering stages
- During the development of the hive
- Collect approximately 20 leaves of each "young" and "old" or 150 grams.

# **Strawberry**

### Sampling plan:

- It is recommended to collect leaves before or around 9am or late evening when the sun sets.
- Can sample every week until crop is finished

### Plant parts:

 Collect the youngest, yet fully developed leaf along with the oldest, vital leaf from the bottom of the plant. Approximately 30 leaves or 150g is required of each "young" and "old"

leaf for an analysis.

Young Leaf



Old Leaf

# <u>Alfalfa</u>

- A sufficient sample size is approximately 150 grams of each "young" and "old" leaf.

