

# Manual plant sap sampling

## *Corn*



### Contact details

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## ***Sampling and sending samples***

### **Location**

Take the following steps into account when collecting leaf samples:

- Avoid the outer rows of the field. Also avoid the first and last 10 meters of a row.
- Sample leaves with an average leaf quality. Sample abnormal plants with e.g. deficiency symptoms separately. Might a deficiency be present in the young or old leaves of the total crop, then sample these leaves regularly as a young or old leaf sample.
- Take into account the sunny and shady side of the plant. Always consistently sample the same side.

### **Time of sampling**

It is strongly recommended to take the samples before 9:00 AM. The plant will then have enough leaf-tension with proper moisture conditions.

Sample plan:

- Begin with sampling when the plant has 5 or 6 leaves.
- Just before flowering
- Just after flowering
- During the development of the tassel.

### **Plant parts**

For a young leaf sample, pick the **youngest, fully developed leaves**. For corn this will be the 3<sup>rd</sup> leaf from the top of the plant. Also pick (separately) the **oldest, but still vital leaves**. Most of time this is the 3<sup>rd</sup> leaf from the lowest part of the plant (see pic 1). The part from the middle of the leaves will be used for the samples (see pic 2).

It is not allowed to send in samples that have a fungal, bacterial or virus infection. The leaves must also be free from insects.

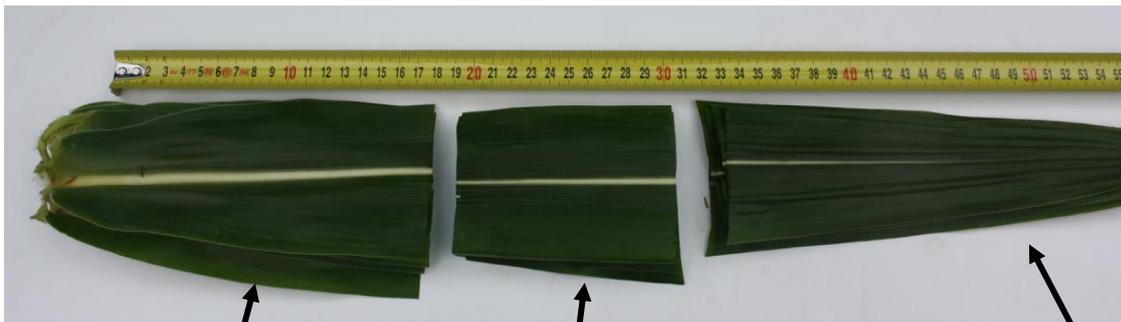




Young leaf, 3<sup>rd</sup> from top

Old leaf, 3<sup>rd</sup> from bottom

Pic. 1



Pic. 2

10 cm. from the middle is used for the leaf sample

Lowest part of the leaf will not be used

The top of the leaf will not be used





### Sample size

For an average, representative sample about 20 leaves are needed, at least 150 grams. Of course sample size can vary, depending on leaf type (size and thickness). Might you doubt about the sample size, please feel free to contact us.

### Packing the leaf samples

When leaves are wet on the outside due to dew or rain, they can be dried with a tissue. Leaves have to be dry from the outside to be analyzed because water will have an influence on the results. Moreover, the leaves will spoil faster if there is water in the sample bag.

Please pack the young and old leaf samples separately, these will be two different samples. To assure fluent processing please stack the leaves, fold the leaves if needed, and put them in a plastic zip-lock bag carefully. Make sure all air is out, so any leaf evaporation is excluded. See pictures.



Fill in the labels correctly and place them on the bags (see pictures below). We prefer pre-printed labels because it saves us a lot of administration time. It has also advantages for you:

- When using Bemesting-Online program you need the same location names and crop names to make comparisons (graphs), pre-printed labels make this a lot easier;
- If our employees must read what is on the label, the chance of reading errors is very high, this is not the case with preprinted labels;
- You no longer must write the location and crop name on the label on the spot.

Let us know if you need help with this.





### **Sending the samples**

The sample zip-lock bags with barcode can be sent in an envelope (make sure it fits in a mailbox (max 3,5 cm. high)). In case you want to send more than one sample, please send them together in 1 box, so they will arrive together. Then put sufficient postage on the envelope or package. Always check the weight. Please take care that envelopes are sealed well. You can put an extra tape over the closure to avoid opening during transportation.

We recommend to sample crops on Friday and send the same day by DHL or FedEx, then NovaCropControl is receiving your samples in the beginning of the next week. Please put €1.00 as the shipment value on the sample package.

Do you ship samples from outside Europe? To avoid clearance delay at the customs please consult our shipment guide for sending samples to Europe. You can find this guide at our website: <https://www.novacropcontrol.nl/en/sampling>

Please send samples to the address below:

**NovaCropControl**  
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