



Plant sap sampling guide

Cucumber



Contact details

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Collecting and submitting samples

Location

Take the following steps into consideration when collecting leaf samples:

- Avoid the outer rows of the field and the first and last 10 yards of a row.
- Sample leaves of average leaf quality.
- Sample abnormal plants (with deficiency symptoms) separately. If a deficiency might be present in the young or old leaves of the total crop, sample these leaves separately as a young or old leaf sample.
- Keep in mind 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.

Begin with sampling the leaves one week after planting, then every week. The same applies to water samples, irrigation, slab and drain water. Until the cultivation is finished.

Plant parts

For a young leaf sample, pick the **youngest, fully developed leaves**, about 50 – 100 cm. from the top of the plant (depending on the growing stage of the plant). Also pick (separately) the **oldest, but still vital leaves**. This is the 1st or 2nd vital leaf from the lowest part of the plant (see pictures 1-4). Stack the leaves for each sample and remove the petioles, as they will not give a good indication and influence the sample.

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, fully developed leaf

Old, vital leaf

Pic. 1





Pic. 2 Young leaves from the top of the plant



Too young, not fully developed

Fully developed leaf

Youngest, fully developed leaf

Pic. 3 Old leaves from the lower part of the plant



Too old, not vital leaf

Oldest, vital leaf





Pic. 4

Youngest, fully developed leaf

Oldest, vital leaf

Sample size

For an average, representative sample about 10 leaves are needed, 150 grams should be enough. Of course sample size can vary, depending on leaf type (size and thickness). If you are unsure 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.





Sampling water

Make sure that the bottle is completely full. The analysis may be wrong if there are air bubbles in the bottle.



Right



Wrong



Wrong

Take a drip water sample at the dripler like in the picture below. A slap water sample can be taken by a syringe out of the substrate bag. Make sure you take the samples from several substrate bags, see the picture below. A drain water sample can be taken from the water return system.



The labels for a water sample need to be placed in such a way that the barcode is still readable. Tighten the cap enough so that it does not leak. Do not overtighten as this may break the cap.





Sending the samples

The leaf samples in zip-lock bags with barcode can be send in a box. Make sure you put all samples in one package so it will all arrive at the same time. In case you want to send one or two samples, you can put them in an envelope. Put sufficient postage on the envelope or package. Always check the weight. Please take care that envelopes and bags are sealed well. You can put an extra tape over the closure to avoid opening during transit.

Do you ship samples from outside Europe? To avoid clearance delay at the customs and high costs please consult our shipment guide for sending samples to Europe. You can find this guide at our website.

Please send samples to the address below:

NovaCropControl

Street: Nijverheidsweg 30

Zip-code: 5061 KL

Town: Oisterwijk

Country: The Netherlands

