# NovaCropControl

# Plant sap sampling guide

# Wheat



## **Contact details**

NovaCropControl
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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 greenhouse or 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.

Start sampling when the plant is 20 cm, then when the plant is in its fast-growing stage, then in its flag leaf stage. Stop with sampling when the grain head is emerged.

### **Plant parts**

For a wheat sample in the tillering growth stage you can sample leaves from the plant base, this is a young leaf sample. When the crop is in the stem extension growth stage, then sample the young and old leaf separately (see picture 1). A young leaf is defined as the youngest, fully developed leaf from the top of the plant. An old leaf is defined as the oldest, but still healthy leaf from the bottom of the leaf.

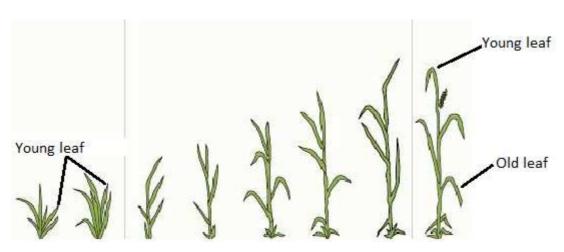
Keep in mind to remove the stems from the leaf, as they will not give a good indication and influence the leaf sample.

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









Pic. 1

### Sample size

For an average, representative sample about 3.0 ounces are needed. 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.

The sample will have enough mass when the sample bag is filled for ¾.







#### 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 preprinted 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 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