

GREENHOUSE GROWTH MEDIA SAMPLE SUBMISSION FORM

Personal information collected by the Soil, Plant & Feed Laboratory is used in order to process and report on samples submitted for analysis. This information is kept confidential and handled as required by the Access to Information and Protection of Privacy (ATIPP) Act. It may be shared within the Department for program delivery purposes. Any questions or comments can be directed to the Manager of Agricultural Research at 709. 637.2089

| SAMPLE SUBMISSION INFORMATION | | | |
|-------------------------------|------|----------------------------|-------------------------------|
| Name: | | LABORATORY USE ONLY | |
| Farm name: | | Laboratory ID #: | |
| Farm Registration No.: | | | |
| Address: | | Date received: | |
| City/Town: | | Number of samples: | |
| Postal code: | | Sample type: | |
| Phone: | Fax: | Notes: | Payment |
| e-mail: | | | Paid <input type="checkbox"/> |
| cc: | | | Date: _____ |

| ANALYSIS | |
|--------------------------------------------|-----------------------------------------------------------------------|
| Check: | Details |
| <input type="checkbox"/> Growth Media | pH, Soluble Salts, Nitrates, P, K, Ca, Mg, Fe, Mn, Cu, Zn, B, Na, Mo. |
| <input type="checkbox"/> Nutrient Solution | pH, Soluble Salts, Nitrates, P, K, Ca, Mg, Fe, Mn, Cu, Zn, B, Na, Mo. |

| SAMPLE INFORMATION | | | | | | | |
|--------------------|-----------|-------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|------------------------|
| Lab ID | Sample ID | Media Type* | Crops to be grown | Purpose of Media | LABORATORY USE ONLY | | |
| | | | | | pH | Nitrates | H ₂ O Cond. |
| | | | | <input type="checkbox"/> Seedlings <input type="checkbox"/> Young pots and foliage plants <input type="checkbox"/> Pot and bedding plants-growing on <input type="checkbox"/> Vegetables in ground beds <input type="checkbox"/> Roses, mums, snapdragons in ground or raised beds | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | Comments: | | | |
| | | | | | | | |

***Note:** Peat, bark, coir, perlite, vermiculite, rock wool, polystyrene foam, etc.

Samples can be dropped off Monday – Friday 8:30 AM to 4:30 PM (closed 12:30-1:30 PM).

Provincial Soil, Plant and Feed Laboratory Services and Pricing

Sample Types Accepted at Laboratory:

| Soil | Soil Amendment | Leaf Tissue | Feed |
|--------------|-----------------------|--------------------|-------------|
| Mineral soil | Compost | Vegetable | Ration |
| Organic soil | Manure | Fruit | Forage |
| Greenhouse | | | Grain |
| Growth Media | | | Hay |
| | | | Silage |

Note: For information about sample analysis on other sample types not listed above, please call 709.729.6738

Costs:

Commercial Farmers

| | |
|----------------------------------|-----------|
| Routine soil analysis | \$9 + HST |
| Routine feed analysis | \$7 + HST |
| Greenhouse growth media analysis | \$7 + HST |
| Manure/Compost analysis | \$7 + HST |

Home Gardeners

| | |
|-----------------------|------------|
| Routine soil analysis | \$20 + HST |
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Note: No discount for multiple samples

Sample submission:

Send samples and completed Sample Submission Form with fee to:

**Soil, Plant and Feed Laboratory
Provincial Agriculture Building
P.O. Box 8700, 204 Brookfield Road, St. John's NL, A1E 0B2
709.729.6738**

Note: Fee should be payable by cash, credit card, cheque, or money order (to "Newfoundland Exchequer Account"). Debit can be used in person.

- **Sample Collection**

Greenhouse growth media should be tested frequently during the entire growing period. Pre-plant media analyses provide an indication of potential nutrient deficiencies, pH imbalance, or excess soluble salts. Media testing during the cropping season is an important tool for monitoring pH and soluble salts levels and managing crop nutrient. To use this tool effectively, it is very important to collect the representative samples of the bed or bench of a given crop. A sampling strategy should consider crop species, planting time, container size and environmental parameters such as shading, location in greenhouse or nursery bed, etc.

The sampling unit might reasonably be a particular crop planted at one time and grown under the same condition. In a mixed greenhouse, crops different species must be sampled separately for the tests to have any value. If a problem is being diagnosed it is best to have a sample from both normal and abnormal plants for comparison. Once the sampling unit is determined, a composite sample can be assembled by taking several subsamples from randomly chosen pots within the unit and mixing them together into a large collective sample. This will give an overall estimate of the crop's nutrient status with the fewest number of samples.

For potted plants, a minimum of 3 pots should contribute to the composite sample. Subsamples are chosen randomly on the bench, including the edges, since differential drying of these pots can affect salts accumulation. Each of these subsamples should include the growth medium from the whole root zone from the surface to the bottom of the raised bed or container. There are significant differences in soluble salt levels for media from different depths in a pot or bed, especially at high fertilization rates, under sub-irrigation or when pots are not well leached. For plugs and small cell packs, 5 to 10 representative flats should contribute to the composite samples. A plant from each flat should be sacrificed and its media collected for the pooled sample. Having separate flats for sampling purposes avoids the problem of having empty cells. Thoroughly mix the subsamples together to create a pooled sample for lab analysis.

Samples should be taken at about the same time in relation to fertilization. If a crop is receiving routine liquid fertilization, it is generally accepted to wait four to six hours after the application before sampling, because drier samples are easier to handle. However, waiting too long after fertilization increases the variability between pots.

- **Sample sizes**

500mL to 1000mL (1 litre).

- **Sample Shipping**

Make sure that media samples are shipped earlier in the week so that they reach the lab before the weekend.

Enclose the submission form in its own separate bag to prevent damage to the information on the form in case of a leak.