

Winter Greens: Sprouts, shoots and cold frames.

By: Niki Jabbour, 'The Year-Round Gardener'

Executive Summary:

Niki has just published a new book called "The Year Round Vegetable Gardener." She is an abundance of information and inspiration in the world of sprouts, shoots, micro greens, and cold frames. She shares with us her tricks of the trade on how you can have greens all winter long.

Detailed Notes:

Niki is the author of a new book called "The Year Round Vegetable Gardener". She also has a blog called: Yearroundveggiegardener.blogspot.com. Niki is also the radio host of "The Weekend Gardener."

Niki has something green in her garden 365 days/yr. One of the first pictures in her slide show was taken January 15th. One of her cold frames had 500 carrots!

You can't get more local than your yard! Winter colds frames are EASY because everything is dormant. It is also nutritious to eat greens in winter. Sprouts, shoots, and micro greens are healthier than adult plants or seeds. Also, kales and other hearty greens get sweeter in the winter because their starches change into sugar. If it is so easy to get good greens in your garden all year, why would you get things from so far away? Learning to produce your own greens is a way to reduce your environmental footprint, and it's cheaper than buying the equivalent in the stores!

It is important if you are going to get seeds for sprouting, then you need to buy the seeds from a company that is growing specifically for micro greens. The seeds should be UNTREATED!

Sprouts:

- Sprouts are living food and there are so many benefits for you. They have live enzymes, minerals, and vitamins. Spinach sprouts are good for fighting against cancer. Most seeds can be sprouted, but do get specific untreated sprouting seeds.

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- It is possible to do sprouts for market too! They could be seeded Tuesday, harvested Friday and brought to market Saturday, for example. It would be good to bring an information sheet that says how to use the sprouts and why they are beneficial.
- Things you need: Mason jar, cheesecloth, and elastics.
- Make sure everything is clean
- Can't over rinse – 2-3times a day
- Mung beans – need to be sprouted in the dark or they will taste bitter. Beware that the mung beans won't be the same if sprouted at home as they are when you bought them at the store because they add fertilizers for commercial production.
- Don't hide sprouts because they won't germinate properly in the dark or without proper airflow.
- To store sprouts for a few days rinse them so that the husks come off. After that you can store them in the fridge. The husk is the part that will go bad first.
- Different kinds of sprouts that Niki highlighted:
 - Some seeds emit gel so they shouldn't be sprouted in water only, but should be sprouted in soil, for example arugula.
 - Cabbage is the healthiest.
 - Leeks can be sprouted as well.
 - Kidney beans cannot be sprouted for eating raw; they must be cooked after sprouting.
 - Almonds come alive when they are soaked and they start to germinate. They are more nutritious soaked then raw!

Shoots and micro greens

- Shoots and micro greens are like sprouts but a little further along. They are also different because they are planted in soil. They are planted really densely and hold each other up.
- It is beneficial to add kelp to the shoots and micro greens to add minerals and micronutrients.
- They are ready in 7-21 days. Harvest when they are 2-5 inches long. They should be picked before they are tough.
- Niki really likes sunflowers; make sure to harvest them before they are woody.
- You can use any kind of container to start your shoots and micro greens as long as it has GOOD DRAINAGE or else you risk them rotting.
- You can use mats to start the shoots and micro greens (instead of soil). Try and use organic mats though so that you can compost them afterwards. You can get pomace or felt pads.
- You can pre-soak seeds if you want, but Niki doesn't. It just means it takes a little longer for them to come up, but there are therefore less steps.

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- Niki puts her seeds in soil on a tray with a paper towel on top to help preserve the moisture. It is important to take the paper towel off as soon as the seeds have sprouted!
- If you are going to blend many types of seeds together, make sure that you look for seeds that will come up at the same time!
- In the winter, growth is slower.
- With respect to light, the counter top is fine; you can also use a grow light. In the spring and summer you can grow shoots and micro greens outside. If you do grow them outside though, have a screen over them so the birds don't get it.
- Shoots and micro greens should be harvested just before you need them. If you are not going to eat them right away then you should harvest them in the early morning or evening. If you're not going to eat them right away you can also put them in the fridge.
- Pea shoots will re-grow if they are cut above the cotyledon leaves.
- Tip from Niki: sweet basil is really lovely as a micro-green.
- Radishes, and some brassicas have white fuzz that could look like a mold, but they are actually root hairs and are okay!!
- If you have poor germination maybe the seed is too old or dry. Make sure the air circulation is good and they are not too wet.

Cold frames:

- Niki harvests 30 different vegetables in her cold frames.
- A cold frame is a box with a translucent top to trap solar energy.
- Niki's boxes are in ground (for extra insulation). Cold frames can also be above ground, which makes them movable as well. Wintergreens will need more insulation than carrots for example. Her boxes are 3x6, but there are other dimensions that will work. All the cold frame tops are angled to face south! The back of the frame should be 18 inches high, and the front 12 inches.
- You can also make cold frames out of straw bales! You can use an old glass door or window as a top.
- It is important to understand the consequence of our latitude. It's not about how cold it is, but about how much daylight we get. When we get below 10hrs of daylight, there isn't very much that will grow. By November 1st, your veggies should be ready, and the size you want them to be because they won't grow much past then.
 - Let's use lettuce as an example. Say it takes lettuce 45 days to grow under normal conditions. So then count back 45 days from November 1st, add a couple weeks to account for less light (and therefore slower growth), and then you'll know when to plant.
- Where to place it? Your cold frame should be close to the house for easy access. Sheltered from the wind. Niki adds leaves to the back to shelter for protection from north winds. Observe your yard during the winter. The places where the snow melts first are a great place to put your cold frames!

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- Note: at this time of year Niki has her cold frames open because it is still quite warm.
- For building material: local, untreated hemlock is a good wood to use. (It is just as rot resistant as cedar). Polycarbonate is not as insulating as wood. Twin wall is strong. Her kids can stand on it and it won't break.
- Niki uses straw bale cold frames as well. She likes it because the straw bales are an insulating part of the cold frame in the winter, and in the summer she can recycle the bales as mulch. Also, in the spring she can take the two front bales off and do sprouts outside.
- Match crop to season
- Spring and fall are cool seasons and you have to think about ventilation. So you should take the top of the cold frames (called lights) off during sunny days.
- Winter is cold season. You can keep the snow on the top of the cold frames if it will be very cold because it is an insulator (but then you won't get any light). When you go to harvest greens such as parsley and lettuce you should wait until they are thawed or they will get mushy.
- In the summer you can put cover crops where you had your cold frames in order to build soil for the next fall/winter.

Best crops:

- Kale is really hardy especially the blue green leaf!
 - She makes Kale cozies – little plastic coverings over the plant for protection.
- Carrots. They can be harvested all year around; they get sweeter in the cold. She likes atomic red, and purple varieties.
- Mache. It is very delicious. You eat the whole rosette at once (not just the leaves). It will grow with no protection in the garden over winter, and you can harvest in the spring. Or you can put it in cold frames and access it for eating all winter.
- Mizuna. It is cold tolerant and adds a lot of texture and colour for salad.
- Claytonia. It is really nice in a salad mix or by itself. It is very hardy. It can be seeded in November.
- Tatsoi. Very good in stir-fry, it is very nutritious, can be grown in cold frames or hoop house.
- Winter lettuce. Start them under the lights because they are more difficult to get to germinate in the heat of August when you need to be starting them for winter.
- Endive: 'Nianca Riccia' is her favorite variety. She eats them 12 months a year. It will re-grow after you cut it.
- Arugula: She grows 'Sylvetta,' a wild variety that is heartier, and very easy to grow.

References:

- Halifaxseeds.ca
- Westcoastseeds.com

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- Sprouting.com
- Yearroundveggiegardener.blogspot.com
- Facebook: the weekend gardener with Niki Jabbour

Q and A

- Leeks can just be mulched and harvested from the garden all winter.
- Are there regulations with respect to selling sprouts or micro greens at a market?
Answer from the crowd: There are regulations with sprouts, but there are none for micro greens and shoot production if grown in soil – but check with your farmers' market manager to make sure.