

PRODUCING LEAFY GREENS FOR A NEW CSA MARKET

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Mr. Duval is an organic producer of 40 different types of organic fruits & vegetables delivered weekly to 240 families in the Community Sustainable Agriculture (CSA) program.

Today's topics

1. Community Sustainable Farming (CSA)
2. Leafy greens
3. Small scale farming : equipment & techniques
4. Profitability of growing leafy greens

1. Community Sustainable Farming (CSA)

- Quebec: an average of 125 customers per farm.
- USA: Some farmers grow for more than a thousand of customer or families (parts).
- Europe: Holland is a leader in CSA farming with farmers association or COOP.

2. Leafy Green : early crops

- My 2010 experience: In a cold greenhouse, from end-February you can harvest an organic salad mix with onion stem, claytonia, mizuna, mustards, komatsuna (or other asian green).
 - Terminology: Cold greenhouse: no heating system can drop to -15° Celsius during the winter.
- Climate Zone: 4b (Canada) 3b (USDA)

Earth-box :

- 3' large X 12' long X 18'' high box.
- The boxes are filled with a mix of organic black earth with a small percentage of compost and sandy soil.
- To maximize your investment, before filling the box with earth, you can install cup or aluminum water pipe on the ground, connected to a heated water system. This will help keeping a warmer temperature the roots and accelerate the growth.

Winter greens :

- Irrigation : No irrigation is necessary because during winter, because ground-water level is high enough to maintain humidity.
- Pest control: No pest, unless some aphids in February (spinach) when nitrogen level is too high. Eliot Coleman found that he just have to water the soil, in order to drain the excess of N.

3. Small scale farming : equipment & techniques

Six-row seeder (for mesclun) : see Johnny's Selected Seeds catalog

E-Z seeder demo: see this link : <http://www.sezsdr.com/video.htm>

48'' Greens Harvester also available : 30'', 42'' : See Johnny's Selected Seeds catalog

Plastic mulch bed layer (things to know)

- 1) lumpy (grumeleux) earth (not too wet, not too dry)
- 2) Enough amount of earth in front of the bed shaper.
- 3) Good pressure in back of the wheel to stretch the plastic (or biodegradable) mulch.
- 4) Wait 24h before planting or after raining, because the humidity will help to keep the mulch right in place (flat & tighten)

Biodegradable mulch :

Advantages:

- Weed control
- Water control (drip)
- Growing faster (black plastic mulch solarisation)

Disadvantages:

- Direct seedling is mostly impossible – so transplanting is more expensive and complicated.
- Cannot be harvested mechanically so easily

Profitability of growing leafy greens

- Eliot Coleman, from Harborside (Maine), grows for 125 000\$ a year in a small land of 0,61 hectare (ha).
- Soil Building: 34 tons of compost per ha.
- Sustainable Small-Scale farming: Coleman maintains that a 2 acres land, can produce high quality organic vegetables, controlling soil fertility, crop rotation and pest.

Table 1 : O Saine Terre lettuce selection

Seeds Company	Variety	Type	Comment
Johnny's	Sylvesta (OG)	green butterhead	Spring or Fall identical to Nancy, but with added disease resistance
High Mowing Seeds	Kweik	green butterhead	spring and fall medium size head, lime-green butter type suited to cool season crops or unheated greenhouse. Strong tendency to bolt in long days of summer.
High Mowing Seeds	Roxy	red butterhead	spring Glossy, red leaves on the outside and bid bright green heart on the inside.
Johnny's/High Mowing	Magenta (OG)	red summer crisp	Spring or summer Improved Sierra. Good taste and resistance to bolting, tip burn and bottom rot.
Johnny's	Coastal Star (OG)	green romaine	All-season similar to Parris Island but are darker green and more tolerant to heat.
Johnny's	Tropicana (OG)	greenleaf	spring and fall Best heat and bolt tolerance of standard greenleaf types.
Johnny's/High Mowing	Oscarde (OG)	red oakleaf	spring and fall Also suitable for the winter greenhouse.
High Mowing Seeds	Salad Bowl	green oakleaf	spring commonly used for baby leaf production (rapid growth).
Johnny's	Panisse	green oakleaf	spring and fall Smaller and more compact than Saladbowl. Similar to Galisse, which it replaces, with the advantage of better disease and insect resistance.
Johnny's	Outrageous	Salad mix	solid bright red color

