

Low Tunnel Spinach
2011-2012 Variety Trial
photos to accompany research report

UMass Extension Vegetable Program
Winter Production and Sales Project
NE SARE 2010-2014

Planting methods for low tunnel spinach



Seeded Sept 9, 2011

Transplanted Oct 11, 2011

Three rows 6" apart, 4" in-row, on raised beds with plastic
Sarah Bequist assisted with transplanting; spinach was not hurt by a late October snowstorm.

Fall growth of spinach

Table 1. Spinach varieties used in low tunnel trial		
Variety	Type	Days to maturity
Tyee	savoyed	40
Corvair	smooth leaf	39
Spargo	savoyed	37
Space	semi savoyed	39
Red Cardinal	smooth leaf	32

Row Cover was applied Nov. 2

Plastic Dec 13

Photos -- December 20, 2011



Red Cardinal (above) on December 20



Spinach varieties, March 8, 2012



Corvair, Red Cardinal & Tye, before cover was removed

Spinach varieties March 8, 2012



Spargo and Space, before cover removed

Spinach 2012: plastic & row cover removed on same day - March 21



- >95% survival across all varieties
- Dead leaves from winter
- Regrowth
- Some 'slippery stems' on all varieties
- Aphids present



Is spinach well suited to low tunnels?

Benefits:

- Fall harvest
- OW survival is high on plastic
- Many varieties don't bolt rapidly
- Good regrowth for multiple harvests

Challenges:

- Dead leaves need cleanup
- Sensitive to wind burn at opening
- Aphids
- In our direct-seeding trial, survival was lower
- Varieties come and go

Suggestions:

Pick what's ready before plastic cover goes on late fall

Scout for aphids before covering

1st pick & cleanup as soon as plastic removed in spring

Keep row cover on in spring to harden off & regrow

Trial varieties every year, as favorites often become unavailable.

Variety Descriptions from Seed Catalogues



Corvair (F1) (OG)

Product ID: 2571G

Organic smooth-leaf spinach for spring crops. Very dark-green, uniform, oval leaves. Slow bolting. Upright plants hold well. Resistant to downy mildew races 1-11, and 13. **Unsize seed.** Organically grown. Avg. 45,800 seeds/lb. Packet: 1,000 seeds.

Photo and text: Johnny's Selected seeds, 2014

Variety Descriptions from Seed Catalogues



Tyee (F1)

Product ID: 646

Standard savoy spinach.

Known for its bolt resistance and vigorous growth. Dark green leaves with upright growth habit. Suitable for spring, summer, and fall crops. Ideal for overwintering. Resistant to downy mildew races 1, 3, 5, 8, 9, 11, and 12. Avg. 38,100 seeds/lb. Packet: 1,000 seeds.

Photo and text: Johnny's Selected seeds, 2014

Variety Descriptions from Seed Catalogues



'Spargo'

The vigorous spinach variety, 'Spargo' is noted for having excellent seedling vigor, fast germination and early maturation. Its semi-savoyed leaves are ready to harvest in only 37 to 40 days. It is also very slow to bolt and winter hardy.

Photo and text from

<http://www.learn2grow.com/plants/spinacia-oleracea-spargo/>

Jessie Keith

Note: this variety was obtained from Johnny's Selected Seeds in 2011, but is no longer available.

Variety Descriptions from Seed Catalogues



Space Spinach

50 days. Whether eaten fresh or cooked this smooth leaf, slightly savoyed spinach is a slow-to-bolt garden standout. It has an upright growth that produces clean, dark green leaves. It is recommended for spring, summer, and fall sowings, and has an extended harvest period. Resistant to downy mildew, races 1-3. Hybrid Variety

Photo and text from Territorial Seeds



Space (F1)

Product ID: 644

Tried and true variety.

Medium dark green leaves are upright and smooth to slightly savoyed. Resistant to downy mildew races 1, 2, 3, 5, 6, 8, 11, and 12.

Intermediate resistance to cladosporium leaf spot.. Avg. 41,600 seeds/lb. Packet: 1,000 seeds.

Photo and text: Johnny's Selected seeds, 2014

Variety Descriptions from Seed Catalogues

2510SP Space Spinach (37 days) F-1 hybrid.

The Russians won phase one of the space race with their 1957 launch of Sputnik. Space won the spinach race with its spectacular 2005 launch in our catalog. We sold more than 4,700 packets last year, just shy of a quarter ton of seed. Space may be at the final frontier of spinach breeding. As one trialer put it, "Along with Olympia it dusted all the others." Space produces the kind of vigorous big thick wavy mostly smooth slightly savoyed leaves that market growers love and restaurant chefs adore. Sown at normal spring-planting time it will stand at least two weeks. Vigorous at all times, it was the quickest to mature from a fall planting. Upright growth results in good clean dark-green leaves with a juicy sweet taste. Resistant to DM1,2,3.

Text from Fedco Seeds

Variety Descriptions from Seed Catalogues



'Red Cardinal' (25-30 days) has red veins in the leaves and deep red stems (like beet leaves). Harvested as baby greens, they make a beautiful addition to a salad, but they bolt faster than any green-leafed spinach and must be harvested young. - See more at:

<http://www.grow-it-organically.com/spinach-varieties.html#sthash.x0qsIGGR.dpuf>

Photo and text from Grow-it-organically.com.

Note: seed for trial was obtained from Johnny's Selected Seeds; this variety was replaced by 'Red Kitten'