

Organic seeds for organic carrots

Location: Engesvang Økologi ApS, Mindsvej 2, 7280 Sønder Felding

GPS: 55.946816, 8.767338 (Nearby address: Skjernvej 132, 7280 Sønder Felding)

Seeding day: 16.05.2023

Two rows of each variety on beds of four rows, seeded with Monosem precision sowing machine.

The demonstration was placed in bed 13, 14 and 15 from the opening west of the plots.

Seeded at a depth of 1.5-2.0 cm and in relatively dry conditions.

Seeding rate was about 10 % higher than the rest of the field.

The rest of the field were seeded one week later.

The soil type is JB 2 (loamy sand)



Germination test by HortiAdvice, March 2023

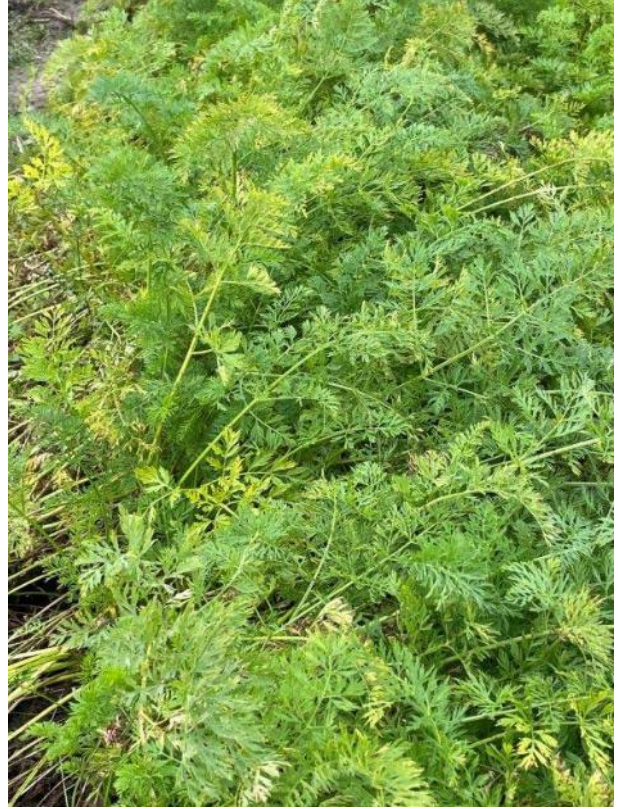
Variety	Lot no.	Germination energy	Germination		Remarks
		7 days	14 days	21	
Bollin	19729 L	65	75	79	
Brilliance		55	70	85	Alternaria
Dolciva	20237M	75	75	78	
Maestro		55	70	70	Alternaria
Napoli	1653933	55	75	75	Alternaria
Natuna		55	70	75	
Naval	1710301	50	65	75	
Negovia	1743530	65	75	80	Alternaria
Milan	19516 L	70	70	75	
Nipomo	1744059	65	75	75	
Octavo		45	65	70	Even more Alternaria
Romance		30	60	75	
Speedo		25	50	60	Alternaria
Vitella	17384 S	50	75	75	

Leaf spot (alternaria) and top color

Brillyance and Dolciva is still low in Alternaria, whereas most of the other varieties is nearly with no leaves on September 28. The leaves are however more yellow and weak in Dolciva then for Brillyance with more strong leaves still for toplifting.



Dolciva. Maturing leaves and leaves with leaf spot.



Brillyance. Still green leaves despite some leaf spot.



Speedo. Regrowth after 100% wilting by leaf spot.



Romance. Nearly all leaves taken by leaf spot.

Out of the 6 locations with demo-plots of organic carrot varieties based on organic seed, this location at Sdr. Felding was the only one with powdery mildew. Brilliance, Maestro, Natuna and Octavo was without mildew in the leaves.

Demonstration of organic seed of different varieties of carrots. Field assessment 29. Sep. 2023

Variety	Phytoplasma, pl/m row	Leaf spot, point 0-9, 0 = non	Powdery mildew, point 0-9, 0 = non	Crop stand, point 1-9, 9=dense canopy	Bulbing, no. per 100 m bed	Yield ¹⁾ estimated in field, ton/ha	Taste ²⁾ , point 1-9, 9=bedst	Comments
Brilliance	0	4	0	8	0	88	5	Long roots and uneven length with a lot also beeing very short. Smooth skin and very easy to wash.
Dolciva	10	5	1	8	1	73	5	Uneven size, some phytoplasma, grooved skin, some with light orange skin and some with yellow tips.
Maestro	1-2	7	0	7	40	86	6	Large roots, low plant density, some Cavity Spot, a lot with rhizoctonia, grooved skin difficult to wash.
Bollin	12	7	1	6	0	83	3	High plant density and lots of small roots, smooth easy to wash, conical pointed roots, some Cavity Spot.
Nipomo	6	7	1	4	0	75	6	Not as long as we often see Nipomo, nice rounded tips, uneven lenght, grooved and a bit difficult to wash. No
Napoli	2	8	1	5	2	70	5	Over mature big rough roots, splits, light orange color.
Naval	0	8	1	4	5	94	6	Nice even size, smooth skin, rounded tips, dark orange skin and dark internal orange color.
Natuna	10	8	0	5	2	86	5	Short conical rounded roots. No diseases.
Vitella	3	8	1	4	0	71	5	Short roots, uneven size, pointed, grooved skin, some uneven color with light and dark orange.
Negovia	2	8	1	4	0	78	5	Short plump roots, rounded tips, few with Cavity Spot.
Speedo	0	8	1	5	6	90	6	Short plump roots, rounded tips, easy to wash, few with Cavity Spot and rhizoctonia.
Octavo	1	8	0	4	0	71	5	Short roots, a bit conical, smooth skin easy to wash.
Milan	2-3	8	1	4	4	73	5	Uneven size, some Cavity Spot, some yellow tips, few splits
Romance	3	8-9	0	1	0	74	7	Long and thin roots (close to snack size), smooth even roots, easy to wash, rounded tips.

¹⁾: Rough estimate in the field based on 2 m row. Yield is very much influenced by germination and weed in organic production.

²⁾: Taste of quartered carrot pieces with skin. 6 persons.

Open-field demo day 30. Sep 2023



Naval



Napoli



Milan



Dolciva



Natuna



Romance



Vitella



Negovia



Speedo



Nipomo



Bolin



Brilliance



Maestro



Octavo

Quality issues



Dolciva with phytoplasma. Also seen in Bollin, Nipomo and Natuna.



Bollin with wild carrot and Aster Yellow.



Cavity Spot in Milan and Speedo. Milan and Speedo are early varieties and over mature at sampling time, so the risk of Cavity Spot will also be higher. Cavity Spot was also found in Maestro, Bollin and Negovia.



Milan with splits. Splits were also found in Napoli. Early overmature varieties are often more prone to splits.



Vitella with grooved skin difficult to wash. Also found in Dolciva, Maestro and Nipomo.



Bollin with yellow tips. Internal color is also light yellow. Same phenomena is seen in Vitella. Whereas Naval has a strong internal orange color.



Maestro with scratches, rhizoctonia, cylindrocarpon and dry rot. Rhizoctonia symptoms like these were also seen in Speedo.

Irm, 05.11.2023

Demo i gulerødder

HortiAdvice gennemføre i 2023 på en række gartnerier med produktion af økologiske gulerødder en demonstration af økologiske frø af gulerodssorter fra OXS.

Promilleafgiftsfonden
for frugtavl og gartneribruget