

Trial Report: Radicchio 2022

Goal: Compare early-maturing red radicchio from three market classes, and **identify bestperforming varieties** for Canadian growers. The trial emphasized identifying **open pollinated (OP) cultivars that compete well with hybrids**.

Background: CANOVI participants began trialing radicchio varieties in 2020, evaluating 13 varieties that spanned four different market classes and ranged from early (~65 day) to late (~120 day) maturity. While several varieties were identified as having higher than average uniformity and bolt resistance, we recognized a need to compare varieties within maturity slot and type, and we did so in 2021. In 2022, growers in Alberta, BC, Ontario, and Quebec compared early-maturing red radicchio varieties that might both reach maturity and fit market needs in this regions.

Varieties: All participants planted three core varieties – two OP and one F1 hybrid Chioggia varieties. Participants had the option of planting any of three additional varieties: another F1 Chioggia, an OP Verona variety, and an OP Treviso variety.



Chioggia

Participants: 18

Market Class	Variety	Core Variety	OP / F1	Days to Maturity	Seed Source
Chioggia	Indigo	yes	F1	65	<u>Vesey's</u>
Chioggia	Sirio	yes	OP	65	<u>Osborne</u>
Chioggia	Vesuvio	yes	OP	55-60	<u>Uprising</u>
Chioggia	Leonardo	no	F1	65	<u>Johnny's</u>
Treviso	TVG1	no	OP	75	<u>Osborne</u>
Verona	Pasqualino	no	OP	60-65	<u>Uprising</u>

Planting: Participants planted **16 plants per variety** at **approximately 12**" **spacing**, using single or multiple rows per bed. Seeds were **sown in flats mid-June** and **transplanted in mid-July** for harvest in early-mid fall. Participants used their usual organic methods for soil fertility and weed management.

Evaluation: Participants evaluated varieties using the desktop or mobile <u>SeedLinked</u> app. Germination, early vigour, bolt resistance, uniformity, yield, marketability, appearance, and flavour were rated on a scale of **1 (low) to 5** (high). A rubric was provided that defined the rating scale for each trait.

Results and analysis: Interactive plots were available on the SeedLinked website immediately after trial closure. In addition, CANOVI researchers performed statistical analysis and presented results in a webinar and in this report.

Please view the **2022 CANOVI Radicchio Trial Protocol** for full instructions and the evaluation rubric.



Treviso



Verona

Varieties by Overall Preference





Leonardo F1



24% 76%

C Pasqualing

Pasqualino



Indigo F1





C Vesuvio

C) Sirio

CO TVG1

Vesuvio



Sirio



TVG1



- Both OP Chioggia varieties competed well with F1 Chioggia varieties. There were no significant differences in ratings for any trait between Leonardo F1, Indigo F1, Vesuvio, and Sirio.
- Of the two F1 Chioggia varieties, Leonardo F1 showed less variability and received higher overall approval from participants than Indigo F1.
- Vesuvio was slightly less vigorous, uniform, and high yielding than the F1 Chioggia varieties, but it several participants praised its flavour. In a raw vs. cooked taste test at an Organic Alberta Radicchio Field Day (n=18 participants), Vesuvio was rated sweetest both raw and cooked.
- Sirio was rated slightly higher by Western participants than Eastern participants for vigour, bolt resistance, and flavour.
- Pasqualino was rated highly for marketability in both 2022 and 2021. It was highest yielding for Western participants and second-highest for Eastern participants.
- **TVG1 was rated a bit higher by Eastern growers** than Western growers for yield, marketability, and flavour.

Blue = Would grow again Red = Would <u>not</u> grow again Varieties are ordered by percent of participants who would grow the variety again

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