

**2024 GUIDELINES
FOR TESTING PERFORMANCE OF
ONTARIO SOYBEAN VARIETIES**

**Ontario Soybean Variety Trials:
Ontario Conventional Soybean Trial
Ontario Glyphosate Soybean Trial**

**Provided through the
ONTARIO SOYBEAN AND CANOLA COMMITTEE (OSACC)**

*These guidelines include the implementation of decisions made at meetings of the Ontario Soybean And Canola Committee (OSACC) over a number of years.
If any errors or omissions are noted, they should be brought to the attention of the soybean coordinator.*

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1. Introduction

The Ontario Soybean Variety Trials (OSVT) are public trials conducted by research institutions in Ontario arranged through the Ontario Soybean And Canola Committee (OSACC). The purpose of the Ontario Soybean Trials is to obtain agronomic, pest, disease, and quality information from oilseed varieties for the purpose of preparing a performance report for soybean farmers and seed industry. Soybeans used for food such as Food Grade varieties are included in the trials for industry information only.

The OSVT are divided into two separate sets of trials; the Ontario Conventional Soybean Trials (**OCST**) and the Ontario Glyphosate Soybean Trials (**OGST**), each grown at the same locations.

OSACC conducts performance testing of entries registered by CFIA, or certified by CSGA, and/or experimentals for a fee.

Entries may only be entered in the Ontario Soybean Trials (OSVT) through a Canadian sponsor. The performance of registered and certified varieties is published in a brochure format entitled 2024 Report, Ontario Soybean Trials and on the OSACC website, soybean.GoCrops.ca which are available in late November.

2. Membership

The Ontario Soybean And Canola Committee (OSACC) is comprised of individuals from the following public and private soybean groups:

- Seeds Canada Seed Industry and Breeder representatives
- Ontario Agricultural College, University of Guelph (OAC)
- Ontario Canola Growers' Association
- Ontario Seed Growers Association (OSGA)
- Ontario Soil and Crop Improvement Association (OSCIA)
- Grain Farmers of Ontario (GFO)
- Canadian Certified Crop Advisor Association (Ontario)
- Ontario Ministry of Agriculture, Food and Rural Affairs - Production and Pathologist Research and Development Centre, Harrow - Agriculture & Agri-Food Canada (HRDC)
- Research and Development Centre, Ottawa - Agriculture & Agri-Food Canada (ORDC)
- Ridgetown campus of the University of Guelph (UGRC)
- Soybean Coordinators/Cooperators

3. Meetings

Annual meetings of OSACC are held during the latter part of January to discuss research reports, trial results and changes or modifications to the testing program. Other meetings may be called as necessary. A quorum is defined as **50%** of the membership of OSACC. Voting is conducted by show of hands unless a secret ballot is requested. All members will vote on all motions unless a conflict of interest is declared. Individuals who are not members of OSACC but are interested in the proceedings of these meetings may attend as observers with the permission of the OSACC Main Committee Chair, Mr. Albert Tenuta, OMAF.

Main committee and research review annual meetings are held near the end of January each year. OSACC arranges an annual Ontario Soybean Tour of public trial sites held during September (see Annex 1).

4. Entry of Lines in Public Trials

4.1 Trial Sites and Co-ordinators

Trial sites for OSVT in 2024 are given in Table 1.

TABLE 1. Trial Sites and Co-operators for Ontario Soybean Trials – 2024

Heat Unit Zone/ Maturity Group	Location	Co-operator	Heat Units Available*	Row Width (cm)	Rows per plot
Early MG00 (00.1 to 00.3) (2200 CHU)	New Liskeard	U of G - New Liskeard	2200	56	3
MG00 (00.2 to 0.1) (2400 CHU)	Dundalk	Kent AG Research Inc	2400	56	3
	Belwood	Kent AG Research Inc	2500	56	3
	Elora	OAC	2550	35	4
MG0 (0.1 to 1.1) (2600 CHU)	Elora	OAC	2550	35	4
	Walton	Kent AG Research Inc	2550	56	3
	Ottawa	ORDC	2750	40	4
	Port Hope	Kent AG Research Inc	2850	56	3
MG1 (0.8 to 1.8) (2800 CHU)	Woodstock	OAC	2700	35	4
	Exeter	RCUG	2900	38	6
	Winchester	KCUG	2825	35	4
	St Marys	OAC	2900	35	4
Early MG2 (1.7 to 2.7) (3100 CHU)	Fingal (loam)	Kent AG Research Inc.	2900	56	3
	Palmyra (clay)	RCUG	3000	43	5
	Inwood (clay)	RCUG	3050	43	5
	Ridgetown (loam)	RCUG	3250	43	5
Late MG2 (2.1 to 3.2) (3400 CHU)	Chatham (loam)	RCUG	3300	43	5
	Merlin (clay)	RCUG	3300	43	5
	Woodslee (clay)		3400	46	5
	Malden (loam)		3500	46	5

*Crop heat units

Co-ordinators for Individual Test Areas are as follows:

Maturity Group (MG) MG Zone Coordinators
(CHU)

Early MG00 Holly Byker
(2200) University of Guelph-Winchester Campus
MG00 12088 Baker Road
(2400) Winchester ON K0C 2K0
hbyker@uoguelph.ca

MG0 (2600)	Dr. Elroy Cober, Ottawa Research and Development Centre (ORDC) Agriculture & Agri-Food Canada 960 Carling Ave, Bldg # 110 Ottawa, Ontario K1A 0C6 elroy.cober@agr.gc.ca
MG1 (2800)	Dr. Istvan Rajcan Department of Plant Agriculture (OAC) Crop Science Bldg University of Guelph 50 Stone Road East Guelph, Ontario N1G 2W1 irajcan@uoquelfh.ca
Early MG2 (3100)	Dr. Milad Eskandari Ridgetown campus - University of Guelph 120 Main Street East Ridgetown, Ontario N0P 2C0 meskanda@uoquelfh.ca
Late MG2 (3400)	Dr. Jamie Larsen Harrow Research and Development Centre (HRDC) 2585 County Rd 20 East Harrow, Ontario N0R 1G0 jamie.larsen@agr.gc.ca

Seed Distributors: The above MG Zone Coordinators are responsible for seed management/distribution and envelope transfers for the Ontario Soybean Variety Trials in their specific MG Zone. Ridgetown Campus-University of Guelph distributes seed for the early MG2 and Late MG2 zones. Contact MG Coordinators for any questions related to entry seed distributions.

4.2 Criteria for Acceptance of Entries

i) Canadian Sponsor

Entries may only be entered in the OSVT through a Canadian sponsor located at a Canadian address. A Canadian sponsor will be an individual or organization involved in an agricultural endeavour in Canada, either public or private.

ii) Seed Requirements

Entries with de-regulated traits that have stewardship requirements or special handling requirements will not be eligible for entry into public trials.

iii) Additional entry conditions

Each test variety may be entered in more than one MG zone, provided the entry test fees are paid for each MG zone.

iv) Number of Entries

Each sponsor may enter ten (10) entries for the OCST and ten (10) entries for the OGST for each MG zone in 2024. Sponsors are allowed a maximum of 20 entries in each OSVT MG zone.

v) Germination Requirement

A germination of 85% will be assumed unless germination testing information to the contrary is provided by the source supplying the seed.

vi) Seed Distribution Protocol for untreated and treated seed (Updated- March 3, 2024)

Fungicide seed treatments will be an optional choice and will be supplied by the seed sponsors. The seed distribution protocol and critical Timeline target dates are outlined below and Annex 1. Contact the MG Coordinators responsible for the MG trial location seed as outlined in the seed distribution list.

OSACC Seed Distribution Table for 2024

HUZ	Maturity Group	Test Location	Trial Cooperator	Seed Distributor	Seeds per Envelope**	Envelopes per Trial	Total # of seed
2200	Early MG 00	New Liskeard	NLUG	H. Byker	400	4	1600
2400	MG 00	Dundalk	Kent AG	H. Byker	400	3	1200
2500	MG 00	Belwood	Kent AG	H. Byker	400	3	1200
2550	MG0	Walton	Kent AG	E. Cober	400	3	1200
2850	MG0	Port Hope	Kent AG	E. Cober	400	3	1200
2750	MG0	Ottawa	ORCG	E. Cober	500	3	1500
2550	MG 00	Elora	OAC	Rajcan	500	3	1500
2550	MG0	Elora	OAC	Rajcan	500	3	1500
2700	MG1	Woodstock	OAC	Rajcan	500	3	1500
2900	MG1	St Marys	OAC	Rajcan	500	3	1500
2900	MG1	Exeter	RCUG	Rajcan	684	3	2052
2825	MG1	Winchester	KCUG	Rajcan	250	6	1500
2900	Early MG2	Fingal (loam)	Kent AG	Eskandari	400	3	1200
3000	Early MG2	Palmyra (clay)	RCUG	Eskandari	500	3	1500
3050	Early MG2	Inwood (clay)	RCUG	Eskandari	500	3	1500
3250	Early MG2	Ridgetown (loam)	RCUG	Eskandari	425	3	1275
3300	Late MG2	Chatham (loam)	RCUG	Eskandari	425	3	1275
3300	Late MG2	Merlin (clay)	RCUG	Eskandari	500	3	1500
3400	Late MG2	Woodslee (clay)	RCUG	Eskandari	320	3	960
3500	Late MG2	Malden (loam)	RCUG	Eskandari	320	3	960
	MG00- MG2L	Phytophthora Trial	AAFC	O. Wally	50	4	200

Chart updated 2024

NEW ** Starting in 2023 Seeds Per Envelope:

Seed sponsors submitting small seeded “Natto type” varieties may add 15% more seed per envelope requested above in the OSACC Seed Distribution Table.

2024 Seed Distribution Timeline

Step 1 March 6-30

Sponsors to submit variety entries to OSACC trials.
Go to Entry Forms tab on sponsor’s homepage. GoCrops.ca/members.
Reference Seed Distribution Table on Entry Form tab for entry listings.
Deadline date to submit entries is no later than midnight March 30.

Step 2 April 1-21

Final Entry lists for each MG trial will be posted by April 1 on GoCrops.ca/members website.
See Seed Distribution Table on Entry Form tab for additional details.
Sponsors label and fill plot seed envelopes with sponsor entry seed for each trial plot.
Sponsors prepare shipping and send by courier or Canada Xpress post.
Delivery deadline to reach seed distributors with seed_envelopes is midnight April 21.

Sponsors assume the cost of shipping stapled envelopes to MG Zone Coordinators.

Step 3 April 22 - May 31

Zone coordinators/trial Cooperators arrange entry seed envelopes for each trial location.
Plan for planting trials in optimum soil conditions.
Recommended that all entries in a trial should be planted all in the same day.
Avoid planting before excessive rain forecasts and frost chances.

Detailed Guide for 2024

Sponsors are responsible for providing seed envelopes with clear identification labels.
Seed numbers as outlined on Seed Distribution Table to be placed in standard size coin #6,
3-3/8 x 6 inches seed envelopes and stapled closed.

Envelopes to be arranged by variety and clearly labeled as outlined on Seed Distribution Table.

Dropping Entries. Sponsors have the option for 2024 to drop entries after entry forms are closed.
How---Open your sponsor Entry Form and check off the “Drop column box” for each entry you wish to drop from the test trials.

Sponsors are encouraged to use this option as early as possible.

Entry Fees will not be invoiced if entry is dropped by midnight April 21.

<p>For 2024 – MG coordinators will check off varieties that have been received by them April 14-21. GoCrops.ca database will <u>auto-generate email notifications to participating sponsors alerting them</u> as to which entries have not been received April 14-20 in advance of the deadline closing date of April 21.</p>
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Reference “Seed Distribution Table” for Packing slips and Addresses for sending seed envelopes to each MG Coordinator:

Holly Byker

12088 Baker Road
Winchester ON K0C 2K0
hbyker@uoguelph.ca

Elroy Cober

Ottawa Research and Development Centre
Agriculture & Agri-Food Canada
960 Carling Ave. Bldg # 110
Ottawa ON K1A 0C6
elroy.cober@agr.gc.ca

Istvan Rajcan

Department of Plant Agriculture (OAC)
Crop Science Bldg
University of Guelph
50 Stone Road East
Guelph, Ontario N1G 2W1
irajcan@uoguelph.ca

Milad Eskandari

Ridgetown campus - University of Guelph
120 Main Street East
Ridgetown, Ontario N0P 2C0
meskanda@uoguelph.ca

Phytophthora Trials –

Send individual packages of **untreated** seed as follows:

Exactly 50 seeds/entry X 4 seed envelopes per entry. Total seed requirement will be 200 seeds.

Use standard size coin #6, 3 3/8 x 6 inches seed envelopes and stapled closed.

**** Do not send treated seed. ****

New -- Send Phytophthora seed envelopes to: **-- New**

Owen Wally
Agriculture and Agri-Food Canada
2585 County Road 20 East
Harrow, Ontario N0R 1G0

viii) Optional Seed Treatments:

Sponsors may treat their seed with ONLY FUNGICIDES.

Choices of OSACC acceptable fungicides include:

Apron Maxx RTA

Vibrance Maxx

Vayantis IV (new)

Evergol Energy

Aceleron basic

No Seed Treatment (NST).

Seed treatments that will **not be accepted** for use on OSACC soybean variety entries are any type of insecticides, nematicides and biological controls or other non-fungicide type chemicals.

Fungicide seed treatments **must be registered** in order to be accepted for use on OSACC variety trials.

Sponsors will provide the name of the seed treatment on their entry forms and these will be available on the entry form drop box and added to seed envelopes.

ix) Information for Entry Forms

Entry forms will be available on the OSACC member's area of GoCrops.ca (<https://GoCrops.ca/members/>). Information for specific MG Trial Entry list can be referenced on the GoCrops.ca sponsors homepage.

Sponsors are required to mark the check box at the beginning of the entry form indicating that they will accept the conditions of the security agreement as outlined in the OSVT Guidelines, Section 4.3 (i) Security of Entries.

If an entry is made under a name or number different from that used previously, both names or numbers must be listed as well as trial year, at the time that the entry application is made.

Please indicate if an entry is a backcross-derived strain of a variety recommended in Ontario.

Entry Forms must include descriptive information on flower colour, pubescence colour and hilum colour. Any Phytophthora resistance (Rps) genes known to be present in a line should be identified.

Information in the "Exname" column is hidden except for Coordinator reference.

When submitting a Food Grade entry for inclusion in the OCST, sponsors must indicate that it is a Food Grade entry and indicate its distinctive attributes. Sponsors should include the CSGA Certificate of Eligibility for Certification number on the entry form; food grade entries lacking this number will be entered as (EXP) entries submitted for performance testing.

Sponsors may elect to mark a Plant Breeders Rights check box on the entry form indicating that they wish to have the PBR 78, PBR 91 or PBR 91 Pending logo attached to their variety name. The PBR 78, PBR 91 or PBR 91 Pending logo will be attached and illustrated on Table 1 for the November review by sponsors and will offer another opportunity for the sponsor to elect the application of the logo to the sponsor's variety.

Seed treatment product identification is mandatory and is made by referring to the drop down box on the entry form.

x) Blends and Brands

Blends of soybean varieties will not be accepted in the Ontario Soybean Variety Trials. Only pure-line material which will potentially enhance the choice of varieties for Ontario growers will be acceptable. Some U.S. companies market soybeans as Brands, which may not be the same variety each year. Such brands will not meet CFIA registration standards. Canadian representatives should ensure that entries are varieties rather than brands.

xi) Conventional herbicide entries in OCST

All entries in the Ontario Conventional Soybean Trials not to contain glyphosate resistance genes.

xii) Deadline for Entries and Seed Submission

Entry forms completed on the website (<https://GoCrops.ca/members/>) will automatically be forwarded to the appropriate zone coordinators and updated on the corresponding entry lists.

Sponsors also have two options to withdraw varieties:

- 1) from the tables by July 1 related to emergence, herbicide damage, etc as noted in section 5.4 of the 2024 OSVT Guidelines;
- 2) another option is to drop a trial variety in October during Table 1 notice of review for sponsors wishing to add or drop varieties or edit column characteristics in the OSVT publication.

4.3 i) Security of Entries

OSACC conducts soybean variety trials in Ontario as an information source for the soybean industry. Its main goal is to compare variety agronomic performance in specific maturity zone test sites across the province. OSACC does not develop intellectual property or make patent applications on the information it collects. OSACC's primary interest is to provide farmers and seed industry a relative comparison of similar soybean varieties for agronomic yield and disease performance in farm field environments.

Seed of OSVT entries will be used only for specific field trial purposes. Seed and/or pollen is not be used for breeding purposes by the trial co-operators, nor will they be distributed to any unauthorized individuals, except under approvals specified by the seed sponsor company, institution or individual.

Sponsors must notify the OSACC Soybean Coordinator in writing before the submission deadline if individual companies/institutions require additional restrictions for the variety.

CFIA notification of the use of Trade names or brands

"The Seeds Act and Seeds Regulations outline that seed sponsors cannot identify a variety solely by a brand name or trademarked symbol; it must have an official variety name that does not include a trademark in any way. Sponsors can use text around the use of the official variety name in order to "brand" their products but the actual name (the official name) will not include these add-ons and advertising and packaging can include these brandings (but they cannot mislead as to the official name of the variety). The official pedigreed seed tag (blue Certified Seed tag) will ONLY have the registered name or official name (for Form 300 crops) on the CFIA logo Certified Seed tag; no branding or use of trademarked symbol is allowed."

4.3 ii) Confidentiality of OSVT publication and OSACC data base information

Copyright/Permission to Reproduce

Materials in the Publication were produced and/or compiled by the Ontario Soybean And Canola Committee for the purpose of providing growers with direct access to information about the soybean varieties. The material in this publication is covered by the provisions of the Copyright Act and by Canadian

laws and regulations. Such provisions serve to identify the information source and, in specific instances, to prohibit reproduction of materials in part or whole without written permission from the Ontario Soybean And Canola Committee only.

© (1987-2024) OSACC. Any reproduction of this report must include at least an entire table.

Requests for reproduction must be made to: Soybean Data Coordinator, OSACC, Box 947 Harrow ON NOR 1G0 and/or email - gositytom@cogeco.ca .

4.3 iii) Canadian Food Grade Database

Contact: SoyCanada.ca

AAFC, Harrow Research and Development Centre is no longer performing Food Grade quality analysis.

Seed of Food Type and dual purpose soybean varieties from the Ontario Conventional Soybean Trials (OCST) which are registered or have a CSGA Certificate of Eligibility Certification number will be analyzed for compositional quality as arranged and administered by Soy Canada organization.

If your organization wishes to have your varieties included for the 2024 crop year, please be sure to indicate this when completing your Entry Form. Requests for Food Grade compositional quality analysis will be forwarded to Soy Canada.

4.4 Entry Fees

The Ontario Soybean And Canola Committee will send invoices to sponsors in July, 2024 (see Timeline of Events - Annex 1) for payment of their entries based on the following fee schedule plus the Harmonized Sales Tax (HST). Applicable fees are as follows:

Starting in 2024 there will be only one entry fee of \$640 for either Registered and/or Experimental varieties.

The \$640 entry fee applies to the MG0, MG1, MG2 Early and MG2 Late zones which have 4 trial locations each. Fees for the MG00 Early zone (1 trial location) will be invoiced at 25% of this rate and fees for the MG00 zone (3 trial locations) will be invoiced at 75% of this rate.

Special notice: Seed sponsors that enter entries into a maturity group and are not able to supply seed to the seed distributors in a timely manner must cancel the entry request by April 21 midnight (see Annex A for deadline dates) to avoid not having to pay the entry fee. The missing entries will be replaced with variety fillers chosen by the MG Zone coordinator.

5. Public Trials

5.1 OSVT Trial Profile:

The Ontario Soybean Trials (OSVT) are conducted across Ontario by MG Zone Coordinators/Trial Cooperators from various institutions and farm locations. For the MG0 (2600), MG1 (2800), MG2E (3100) and MG2L (3400 HUZ) require four trials per Maturity Group. Experimental and Registered varieties were categorized as one category starting in 2021.

Zone Coordinators and Trial Cooperator: Zone Coordinators and Trial Cooperators are required to obtain optimum trial field site conditions with minimum production risks and uniform soils and drainage for testing soybean genetic performance in regional MG field environments.

Field locations for testing OSVT must have uniform soil types for soil specific trial locations ex: clay loam soil types; field topography needs to be level with no undulating low and high areas that do not drain uniformly; trial locations need to be tiled with uniform drainage characteristics; and **all test entry** plot

borders should be a minimum of 12 meters from any treed fence rows and buildings. Trials are managed using accepted best management agronomic practices and the utmost care should be taken to ensure any crop management is uniformly applied to all trial entries.

Planting and harvesting dates should parallel with local grower field operations in order to meet Best Management Practices (BMP) standards. Early harvesting of trial locations is encouraged and not later than October 31 if possible. Planting and maintenance service operators are required to consult with their MG zone coordinator concerning application of all chemicals on the soil and/or seed. MG Zone Coordinators are responsible to ensure accurate application of fungicides and insecticides. All chemicals applied to trial plots must be registered and applied at recommended package label rates.

OSACC does not guarantee that all trial locations will be accepted for publication purposes since factors out of the control of OSACC such as weather extremes, etc. may influence the outcome of trials. Entry fees for invalid trials deemed to be the result of mismanagement will be refunded to the sponsors. Fees for unacceptable trials which, in the opinion of OSACC, were caused by events beyond the control of the trial co-operator such as severe weather events, will not be refunded.

Herbicide Management. The OSVT public trials are divided into 2 separate trials, the OCST and the OGST (Ontario Glyphosate Soybean Trials), based on herbicide management. The OCST, with only standard (glyphosate susceptible) non-GMO varieties will be grown using standard management methods and recommended herbicides (non-glyphosate herbicides) and the OGST will have glyphosate tolerant varieties only, using standard management methods and glyphosate herbicides applied according to label recommended rates and plant growth stages.

OSACC requires that BMP for weed control is required in order to prevent weed impacts on yields across plots. Trial cooperators are asked to take extra weed control measures by knowing the weed history of field plots and adjusting to pressures by alternating weed specific herbicides and additional preplant incorporated soybean herbicides that will add extra weed control in historically problem fields. Timing of herbicides to stop weed growth is essential for control and effect.

Field plots that are inspected and noted to have excessive widespread weed populations across a trial that appear to be overcoming test variety growth will be rejected based upon several inspector reports.

Maturity of Candidates. OSACC does not want to extend the maturity (on the late side) of the entries in the tables in the annual Ontario Soybean Variety Trial Report. The coordinator will identify anomalies each year in the MG tables to indicate the preferred late varieties in each table.

Prior to entry of a line in a MG trial, **the sponsor** should have Ontario maturity test data which would support that the entry would mature no later than the preferred late varieties in the intended MG Table in which it is to be entered.

The zone trial cooperator will have the discretion to determine maturity status of the late entries in relation to surrounding entry maturities and if it is determined (after alerting sponsor) that an entry(s) in a trial is sufficiently late to impair the timely harvest of the trial then the entry will be averted and the remaining varieties in the trial will be harvested.

After analysis of data from the first year in the trial, if an entry is later than any entry in the published corresponding MG table, then the MG zone coordinator will contact and alert the sponsor that the entry might be in the wrong MG zone trial. If the sponsor re-enters the late variety in that trial and it is later than any other registered entry in the MG table, at the coordinator's discretion, the data would not be published.

5.2 Data Collection, Analysis, and Distribution

All Public trials shall have a minimum of three (3) replications/location with entries randomized in an scientific experimental design suitable for the number of entries.

Data for yield, maturity, plant height, lodging, flower, pubescence and hilum color, oil and protein content, and grams per 100 seeds will be collected for all Public trials. Other variables such as height of pods, seed quality and disease or pest incidence may be optionally recorded at the discretion of the MG Coordinator.

Yield should be reported as kg/ha at 13% moisture. Maturity should be recorded as days from planting to the date when 95% of the pods have ripened. Delayed leaf drop and green stems are not considered when assigning maturity. Oil and protein are reported on a dry matter basis and are obtained with an NIR whole-grain analyzer.

All Registered/Certified varieties will be reported in the annual OSVT publication. Data collected from experimental entries in a trial may only be reported to the sponsor or breeder of that variety.

Averaged Trial data for a specific location will be published on the GoCrops.ca sponsors homepage along with the 5 year averages. Data will be available after the annual Soybean Variety Trial publication is completed.

5.3 Evaluation of Special Attributes

(i) Phytophthora Root Rot. All public test entries will be tested at the Woodslee Phytophthora trial area by Dr. Owen Wally, Harrow research centre field crop pathology lab, for field tolerance to prevalent races of root rot caused by *Phytophthora sojae*. Field tolerance will be reported as the average stand at R6 growth stage for each MG trials and reported a minimum of 2 years of data.

Seed Sponsors will be send Phytophthora labelled seed envelopes directly to Ashley Wragg, Harrow Research center as designated in the above Seed Distribution guidelines Section 4.2 vii).

Race specific resistance is not determined; this information is to be supplied by the sponsor if available. Companies or institutions that wish to have a variety/line identified as having specific gene resistance to phytophthora in the annual Ontario Soybean Variety Trial reports should indicate the specific resistance gene(s) on the entry form. Trial fee is allocated from part of the total entry fee for each variety.

(ii) White Mold and SCN trials will not be included for 2024.

Annual OSACC meeting endorsed adding information on SCN:

- 1) Include SCN resistance source to Table 1 for resistant varieties. Identification of SCN resistance sources will be volunteered by seed sponsors.
- 2) Include SCN levels (eggs) and HG Types from all possible OSACC trial locations. SCN egg counts (eggs/100g of soil) will be published in the sponsor homepage GoCrops.ca website. HG types will be published as they become available.

5.4 Inspection of Trials and Validation of Trials

Public Trials will be inspected by members of OSACC. Inspections will be made by representatives of institutions other than those conducting the trial.

Problems with trials should be reported in writing (email) by the Sponsor to the appropriate MG zone Coordinator in a timely manner as soon as the problem is detected. Sponsors must understand that a request to drop one or more plots from a MG trial for an entry because of stand problems etc will require to drop all of the same entry plots in that Trial. Sponsors observing poor emergence for a specific variety seed lot may drop the entry from the MG zone by notifying the MG zone coordinator and the Soybean Coordinator in writing no later than July 1.

Official site inspections:

Trial sites may be inspected randomly by any OSACC members any time. All inspectors will be asked to volunteer positive or negative comments on the condition of the trial plots. The Trial Blog in the GoCrops.ca member's area is for providing timely information on OSVT plots at any time to all sponsors. Posting of pictures from OSVT trial sites is encouraged. It is recommended that trial site plot maps be posted on GoCrops.ca by early July.

Trial sites to include plot numbers at least every 4th plot in the range with clearly identifiable plot numbers that are the same as on the sponsor plot maps. Please use evaluation forms found on the member page of GoCrops.ca. Timely notice of plot conditions is important.

Coordinators, sponsors and technical staff to communicate growing season updates on location conditions, emergence and plot stand problems at 4 different plant stages - after planting, V1-V3, R1-R3 and maturity or leaf drop. Observations can be posted directly on the Trial Blog in the GoCrops.ca Member's Area. Please use OSACC blog to alert members.

Phytophthora trials will be inspected by OSACC representatives of institutions other than those conducting the trial.

All individual OSVT trial locations must have a coefficient of variation (CV) of less than or equal to 15% for seed yield to be considered valid and acceptable for inclusion in the database. Trial data for each trial location must be analyzed using approved and acceptable scientific statistical analysis methods.

6. Performance Reporting and Publication

Any entry which is registered through the Canadian Food Inspection Agency, by November 20, or varieties that are exempted from registration but have obtained CSGA certification by November 20, will be included in Table 1, of the annual Ontario Soybean Variety Trial publication and GoCrops.ca website.

At the request of the sponsor, one year varieties registered by November 20 and having performance information from the OSACC public trials will be entered on Tables 2-6 and will be added to the GoCrops.ca OSVT posted publication for the November 20, January 20, March 20 or July 20th updates.

At the request of the sponsor, additions will be made to the Soybean.GoCrops.ca OSVT tables after November 20, January 20, March 20 and July 20 providing that there is a minimum of 4 new registered or certified varieties for each update addition. If there are fewer than 4 new registered or certified varieties by the 20th of the month then these will be carried forward to the next update of January 20, March 20, July 20 and November 20.

Drafts of Table 1 will be posted on the member's area of the website for sponsors during the last week of October for review and modification.

Maturity will be listed as days to maturity in Tables 2-6. Table 1 varieties will be sequenced by using relative maturity to one decimal point for listing the varieties from early to late. Varieties listed in Table 1 will be assigned a Relative Maturity rating by the sponsor. Evaluation of changes to a variety Relative Maturity grouping will be the responsibility of the sponsor.

Use the following guide for assigning Relative Maturity:

In 2010, OSACC (then OOPSCC) made the decision to use Relative Maturity (RM) ratings for soybean maturity, replacing the system of Heat Unit ratings. Relative Maturity is a system whereby new varieties are compared over years and locations to established varieties, and RM ratings for the new varieties are assigned relative to the established varieties. There are 13 maturity groups (MG) recognized in the Americas ranging from the earliest MG 000 to the latest MG X. In Canada, soybeans in maturity groups

ranging from MG 000 to MG III are grown. Each decimal unit is approximately equivalent to one day of maturity, that is, a variety rated MG 1.5 is about 5 days later maturing than a variety rated MG 1.0 in its region of adaptation.

Rules for assigning a Relative Maturity

1. Varieties with the same average days to maturity, over several years grown in the same trial, should have approximately the same RM rating.
2. Relative maturity ratings cannot be negative.
3. Relative maturity ratings can only have one decimal place. A double zero rating is denoted "00.2", not "0.02".

All data and variety information should be submitted by November 20 (depending on conditions during harvest), in order to be included in the Ontario Soybean Variety Trials Report. Publication editing will be carried out the following few days in order to meet the earliest possible publication date. Tables 1-6 will be made available for sponsor review as soon as all trial location yields are available for that table.

7. OSACC Soybean Database and Preparation of Summaries

OSACC has a custom web-based Data Management System (DMS) for maintaining a database of Public trial results and for computing performance summaries. Each entry designation is assigned a unique numerical code in the program. For the computer to read a data set from a trial, the matching designation for each entry must be in the computer and the data file.

Each spring all soybean varieties to be tested are entered electronically by the sponsors into the OSACC website database to establish the entry lists for each MG zone area trial.

Each year locations for all Public trials are checked against those in the system and any OSACC approved trial locations are entered into the annual guidelines and database.

Annex 1: Timeline of Events:

20-Jan	Refreshing 2023 OSVT Publication and head to head data on GoSoy.ca website for recently registered and certified varieties. Send requests before Jan 20.
20-Mar	Refreshing 2023 OSVT Publication and head to head data on Soybean.GoCrops.ca website for recently registered and certified varieties. Send requests before Mar 20.
Mar 06	Entry Forms open. Sponsors to submit variety entries for testing in OSACC trials by completing GoCrops.ca/members Entry Forms.
Mar 30	Entry forms close. Deadline date to submit entries no later than midnight March 30.
April 1 to Apr 20	Entry lists available. Posted on GoCrops.ca/members sponsor homepages. Label and fill plot seed envelopes with sponsor entry seed for each trial plot.
Apr 8 to Apr 21	Sponsors are to ship filled envelopes to the MG Zone Coordinators/Distributors. Shipping seed envelopes closed at midnight April 21.
Apr 22 to May 31	Zone coordinators/trial Cooperators arrange seed envelopes for each trial location. Plant in optimum field soil conditions. *Avoid excessive rain forecasts and frost chances.*
10-July	Invoices for soybean entry fees to be mailed and emailed.
20-July	Final date for refreshing 2023 OSVT Publication and head to head data on Soybean.GoCrops.ca website for recently registered and certified varieties. Send requests before Jul 20.
Sept 04-30	Self-guided Soybean Tour. Labelled plots in 1st rep. Plot maps and Google map locations and GPS on GoCrops.ca.
15-Oct	First Draft of <u>Table 1 Variety list</u> posted on web site. Sponsors to update list of changes to their entries and MG ratings on Table 1.
04-Nov	Posting of final Table 1 variety list posted on GoCrops.ca/members sponsor pages.
15-Nov	OSVT trial location data summaries to be uploaded by Coordinators.
15-Nov	Posting of Tables 1-6 draft copies as they become available for sponsor review. Check Sponsors Home Page frequently for updates.
20-Nov	Final date for accepting varieties registered CFIA /or CSGA certification in order to be included in Tables 1-6.
24-Nov	Expected posting of final version of <u>2024 OSVT Publication</u> for producers and industry.
Early Dec	Expected posting of 1-5 year averages for each MG zone and update head to head functions.
Jan 22-23 2025	Meetings at Four Points Sheraton, London. Arrangements – Martin Harry. Research Committee meeting of OSACC in afternoon of Jan 22. Main Committee meeting on morning of Jan 23.