WORLD SOYBEAN RESEARCH CONFERENCE XII

4 - 7 April 2027
Rosario, Argentina

"Building innovation in the soybean world."

Call for Abstracts

We invite the global soybean research community to submit abstracts for the World Soybean Research Conference XII (WSRC XII).

The submission period has been extended to December 16th, 2026.

Abstracts of papers will be considered for poster presentation, likewise a selection of submissions may be invited for oral presentation.

WSRC XII will cover the following thematic areas:

1. Soybean germplasm, genetics, genomics, breeding and biotechnology
2. Agronomy and physiology
3. Weeds, diseases and pests and their management in soybean crops
4. Food, feed, nutrition and industrial uses
5. Business and legal issues

WSRC XII 2027 aims to attract a wide range of participants across the soybean value chain—from research and production to commercialization and industrial processing—including agronomists, breeders, geneticists, molecular biologists, plant nutritionists, physiologists, weed scientists, plant pathologists, entomologists, industry representatives, academics, economists, and policymakers.

We encourage you to share your research and findings with the global soybean community.

Submit your abstract at: www.wsrc2027.com.ar

Requirements and Guidelines for Abstract Submission

Format:

Abstracts must be submitted in English as a Microsoft Word document.

* Page size: A4 (210 × 297 mm)
* Margins: 25 mm on all sides

Title:

* Calibri, 16 pt, bold
* Followed by one blank line

Authors:

* Calibri, 12 pt
* Presenting author underlined
* First name followed by last name
* Use superscript numbers for multiple affiliations

Affiliations:

* Calibri, 12 pt, *italic*
* Include full institutional details
* Provide the email address of the corresponding author on a separate line

Leave one blank line before the main text.

Length and Structure:

The abstract must be 200–350 words, written in a single paragraph, using:

* Calibri, 12 pt
* Single line spacing

It should clearly include: introduction, objectives, methodology, results, and conclusions.

Keywords:

Include up to five keywords, separated by commas, on a new line after the abstract.

Acknowledgements:

Optional. Include as a final paragraph after the keywords.

File Name:

The file name should include the presenting author's name.

If more than one abstract is submitted by the same author, add a number (e.g., Smith_1, Smith_2).

Submission Policy:

* A maximum of two abstracts per registered author is allowed.
* Abstracts will be peer-reviewed.
* Authors will be notified of acceptance or rejection by **December 18, 2026**.
* Final acceptance is conditional upon registration and payment by the presenting author.

A confirmation of receipt will be sent automatically to the email address provided.

For inquiries, please contact: secretaria@wsrc2027.com.ar

Example of Abstracts

Streptomyces spp. treatment increases soybean yield and seed quality under field conditions

David Villafañe[1], Rodrigo Maldonado[2], Julieta Bianchi[2], Eduardo Rodríguez[1], María Amalia Chiesa[2]

[1]Microbiology Division, Instituto de Biología Molecular y Celular de Rosario, Consejo Nacional de Investigaciones Científicas y Técnicas (IBR-CONICET), Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario (UNR), Rosario, Argentina, [2]Laboratory of Plant Physiology- IICAR-CONICET/UNR. Pque. Villarino S/N, Zavalla, Argentina.

mchiesa@unr.edu.ar

Nowadays the development of sustainable and environmentally-friendly strategies using soil beneficial microbes as plant growth-promoting rhizobacteria (PGPR) and biocontrol agents (BCA) is gaining great consideration to reduce the use of agrochemicals in crops production. Considering the above, 78 actinobacteria from the genus *Streptomyces* were isolated from the rhizosphere and endosphere of soybean plants from the Argentinean core production zone. Among these, two strains (N2A and N9) were selected based on their in vitro compatibility with *Bradyrhizobium japonicum* (B), their ability to produce phytohormones, siderophores, phosphate solubilization and their antagonism to fungal pathogens. These strains were evaluated during 2021/22 growing season to analyze their effect as PGPR under field conditions. The

treatments were N2A+B, N9+B, fungicide (F+B) and control (B). The assay was performed following a completely randomized block design at the experimental field (Agronomy Faculty-Zavalla, Santa Fe, Argentina). As results, *Streptomyces* spp. treatments significantly promoted seedlings emergence compared to B and F+B. At harvest, both *Streptomyces* strains significantly increased seed yield (g/m2) compare to the conventional agronomical practice (F+B), and N2A+B also showed higher yields than B ($P<0.05$). These increases were related to rises in seed number/m2 and pod number in the main stem ($P<0.10$). Finally, a significant increase in vigor and health status was observed for seeds obtained from plants of both *Streptomyces* treatments in comparison to seeds obtained from B and F+B treatments, while no differences were observed in protein and lipids content. Altogether, we demonstrated that the seed treatment with *Streptomyces* spp. promotes growth and development of soybean crop, possibly due to a better nutritional and health status of the plants, increasing yield and the physiological and sanitary quality of the seeds in field conditions. Thus, we propose the replacement or complementation of traditional agrochemicals with more efficient and environmentally friendly technologies based on these soil bacteria.

Keywords: Actinobacteria, biostimulants, biocontrol agents

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Soybean stem canker: molecular markers assisted stacking of Rdm/Rdc genes

Rodrigo Maldonado[1], Julieta Bianchi[1], Victoria Moser[1], Alejandra Peruzzo[2], Alejandro Rojas[3], Rosanna Pioli[2], María Amalia Chiesa[1]
[1]*Laboratory of Plant Physiology- IICAR-CONICET/UNR. Pque. Villarino S/N, Zavalla, Argentina,*
[2]*Laboratory of Plant Pathology- IICAR-CONICET/UNR. Pque. Villarino S/N, Zavalla, Argentina,*
[3]*Department of Entomology and Plant Pathology, University of Arkansas, Fayetteville, United States*
mchiesa@unr.edu.ar

Soybean [*Glycine max* (L.) Merr.] crop is seriously affected worldwide by stem canker (SSC) disease, caused by *Diaporthe aspalathi* (ex *D. phaseolorum* var. *meridionalis*) (SSC-Da) and *D. caulivora* (SSC-Dc). Both *Diaporthe* spp. coexist in the core productive zone of Argentina and can infect stem and seed tissues. Furthermore, with the increased seed movement between northern and southern states in US and between US and South America, the development of resistant germplasm is determinant to reduce the impact of these pathogens on crop production and seed quality. Thus, the

objectives of this work were (i) to analyze the resistance sources to SSC-Da (Rdm genes) and SSC-Dc (Rdc gene) present in the varieties currently sown in Argentina, as well as in germplasm from the University of Arkansas (US), by genotyping with molecular markers (MM) linked to Rdm3, Rdm4, Rdm5 and Rdc1 genes previously identified by our group; (ii) to stack Rdm3, Rdm4-5 and Rdc1 genes conferring resistance to SSC-Da and SSC-Dc, respectively, in order to confer a more durable and broader resistance to both causal agents. The results indicate that 55% of the genotypes have the Rdm4 gene incorporated, less than 5% have the Rdm3 gene, 21% have other alleles and the remaining do not present resistance alleles. Meanwhile, none of the tested genotypes have the MM linked to Rdc1 gene incorporated. These results suggest that most of currently cultivated soybean germplasm has the same resistance source to SSC-Da and does not present resistance to SSC-Dc. Finally, based on these results and assisted by the linked MM, the stacking of Rdm3, Rdm4 and Rdc1 genes in elite germplasm with good agronomic performance is in progress, to be used as donors in breeding programs aimed to incorporate a broader and more durable resistance to SSC.

Keywords: *Diaporthe* spp., genetic resistance, genotyping, markers-assisted selection (MAS), Stacking

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3. The corresponding author confirms that all co-authors have approved the submission and that all significant contributions are acknowledged.

4. At least one author must be registered and attending at the Conference to present the work.

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