GUIDELINES FOR ABSTRACT SUBMISSION

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GUIDELINES FOR ABSTRACT SUBMISSION:

1) The submission of abstracts is only possible after **registration and payment confirmation**. Bank invoices require 2 to 3 business days for confirmation.

2) The author/presenter of the paper must be registered for the Congress.

3) An author may register and present only **up to three papers**; however, they may co-author others.

4) Only abstracts of **unpublished** papers may be submitted.

5) Project descriptions, paper intentions and published papers **will not** be accepted.

6) The abstract must be sent **electronically, DOC/DOCX format, only**. Works in **PDF** format will not be accepted.

7) The abstract must be written in **English**.

8) The submitted abstracts will be analyzed by the Congress Scientific Committee and the result will be made available on the event website by participant's name or CPF number.

9) The analysis encompasses the following aspects: relevant, clearly stated objectives; appropriate methodology; clearly presented results; pertinent conclusions. The text quality (grammar, spelling and typing) is the author's responsibility and is one of the Scientific Committee's evaluation criteria.

10) **After April 25th** the abstract submission forms for oral presentation will be **unavailable**.

After July 20th the abstract submission forms for poster presentation will be **unavailable.**

11) The Works selected for the poster presentation should be displayed at the Poster Session, in English, during the event. The designated area for each poster will be a **1m x 1m**. panel.

12) The Poster must have a **hanging cord and/or adhesive tape** to be held in place.

PRESENTATION AREAS:

(1) Biomass

(2) Biofuel Technologies

(3) Alcoholchemistry and Biorefineries

(4) Engines and other conversion devices

(5) Sustainability

(6) Process integration

ABSTRACT MODEL:

The number of words (from introduction to conclusion) must be between 200 and 450 (use MS Word'sWord Count tool).

Abstract Example

Dual targeting of RNA-binding proteins to mitochondria and chloroplasts

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Keywords: Arabidopsis, GFP, point mutations

A massive transfer of mitochondria and chloroplast DNA to the cell nucleus occurred during the evolution of these organelles. As a consequence, most of their proteins are encoded by nuclear genes and have specific N-terminal targeting sequences. Although cell compartmentalization enables distinct roles to organelles, they may have overlapping functions, and a given protein may be required to more than one compartment. Dual targeting appears as a strategy to deal with this requirement. Approximately 30 Arabidopsis thaliana proteins are known to be dual targeted, and most of them are involved in transcription, translation, and oxidative metabolism. Herein we describe the dual targeting of three RNA-binding proteins of A. thaliana to mitochondria and chloroplasts. These proteins are characterized by a conserved RNA recognition motif (RRM) and a C-terminal glycine-rich sequence. Proteins containing a RRM motif are involved in post-transcriptional processes and regulation of gene expression. Using a GFP approach and bombardment of Nicotianabenthamianamesophyl cells, we demonstrated the dual targeting of the RBP1a (At4g13850), RBP1b (At3g23830), and RPS19 (At5g47320) proteins. Their N-terminal amino acid sequences are relatively conserved, suggesting that they originated by gene duplication after acquisition of the targeting sequence (TS). When the first 39 amino acids of RBP1b were deleted, the protein was localized only to the cytosol, indicating that the signal for RBP1b targeting is located in its N-terminal region. In order to identify residues important for chloroplast and/or mitochondria targeting, we introduced point mutations and deletions into conserved residues of RBP1b TS, and evaluated their effect in the relative mitochondria/chloroplast targeting, using a novel GFP quantitative approach supported by statistical analyses. Mutations and deletions of serine residues along the TS had no effect on the dual targeting of RBP1b, although chloroplast-targeting sequences are normally rich in serine residues. However, mutations of arginine and lysine at the N-terminal region reduced targeting to mitochondria, pointing to the involvement of positive residues in the protein

targeting to this organelle. Deletion of the first part of the TS (amino acids 2 to 17) abolished RBP1b targeting to mitochondria, and the protein was localized to the chloroplasts and cytosol. When the second part of the TS (amino acids 18-30) was deleted, RBP1b was detected, but with lower intensity, in chloroplasts, mitochondria and cytosol. Therefore, the signal for RBP1b targeting to chloroplasts is located along the TS, and targeting to mitochondria depends on the first part of the TS. While the first part of RBP1b TS has the information to promote the protein dual targeting, the second part appears to be involved with the efficiency of the process.

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