

# **Soybean roots defence against cadmium and its dependence on dose in a non-linear manner**

Patrik Mészáros<sup>a,\*</sup>, Ľubomír Rybanský<sup>b</sup>, Monika Bardáčová<sup>c,\*\*</sup>, Marcel Roszival<sup>a,\*\*\*</sup> and Ildikó Matušíková<sup>c,\*\*\*\*</sup>

<sup>a</sup>Department of Botany and Genetics, Constantine the Philosopher University, Nábřežie mládeže 91, 949 74 Nitra, Slovak Republic; <sup>b</sup>Department of Mathematics, Constantine the Philosopher University, Tr. A. Hlinku 1, 949 74 Nitra, Slovak Republic; <sup>c</sup>Department of Ecochemistry and Radioecology, University of SS. Cyril and Methodius, Nám. J. Herdu 2, 917 01 Trnava, Slovak Republic

**CONTACT** Patrik Mészáros **e-mail** [pmeszaros@ukf.sk](mailto:pmeszaros@ukf.sk)

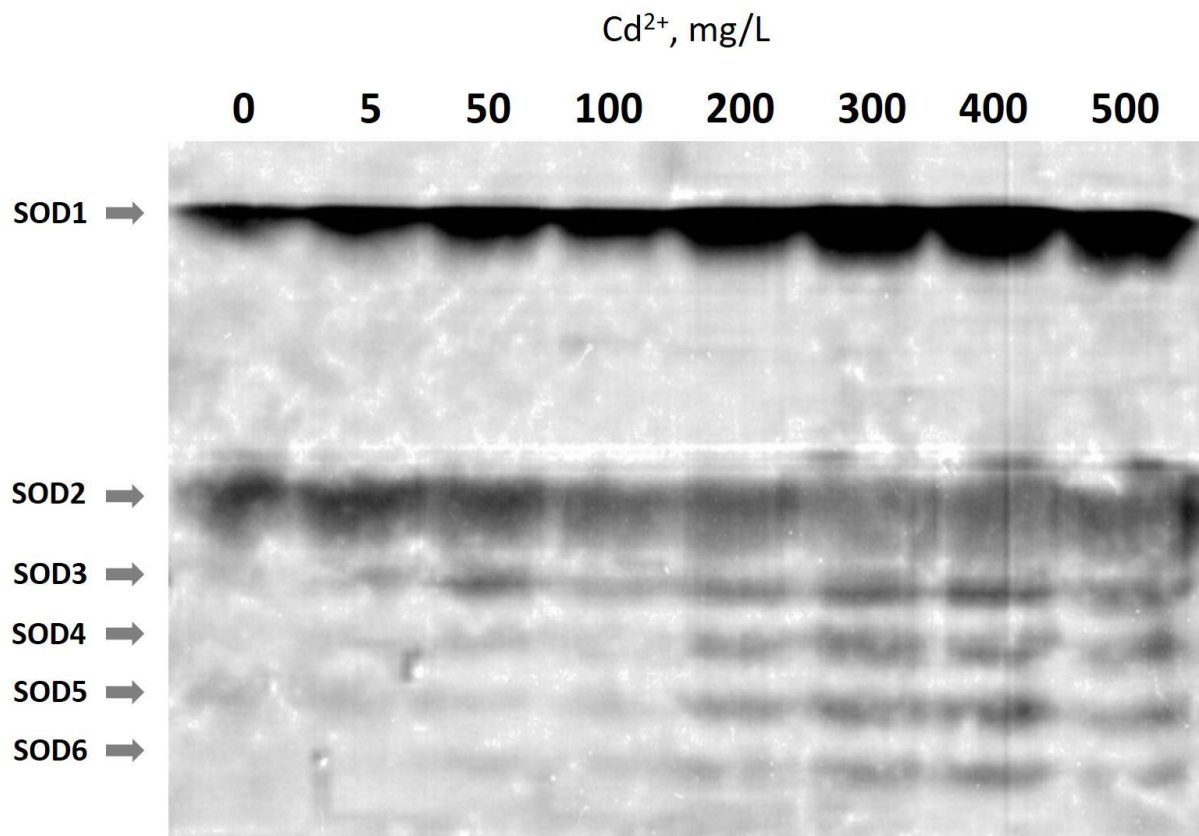
\*ORCID: 0000-0002-9521-3986

\*\*ORCID: 0000-0002-6663-3463

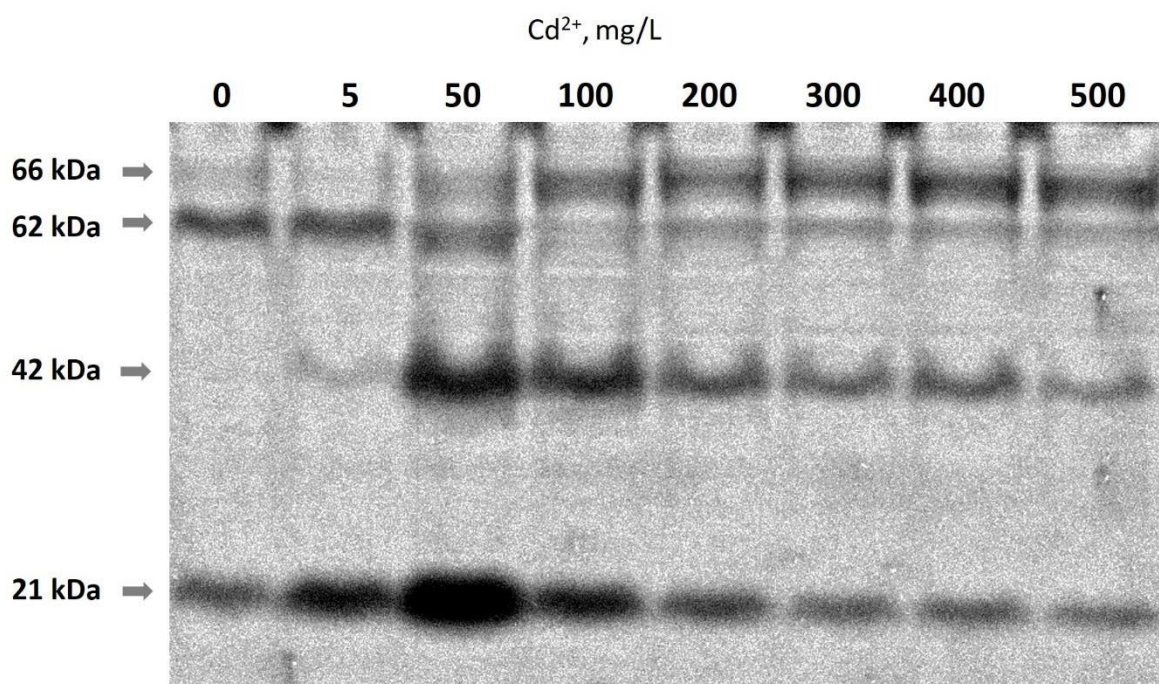
\*\*\*ORCID: 0000-0002-1138-5992

\*\*\*\*ORCID: 0000-0001-5570-5065

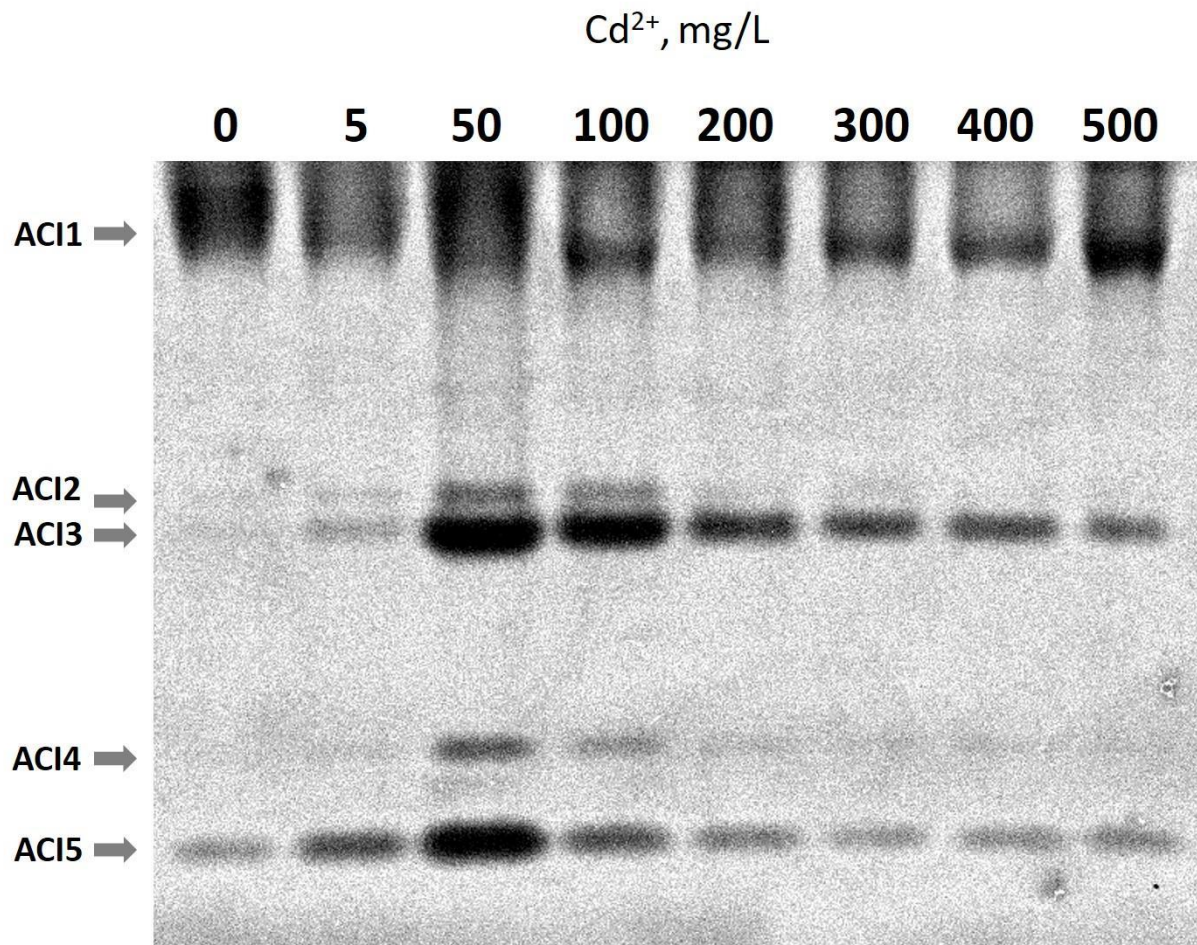
**Supplementary material**



**Figure S1.** The gel profile of SOD enzymes detected in roots of *Glycine max* cv. Merlin stressed by cadmium. Six isoforms were detected and quantified.

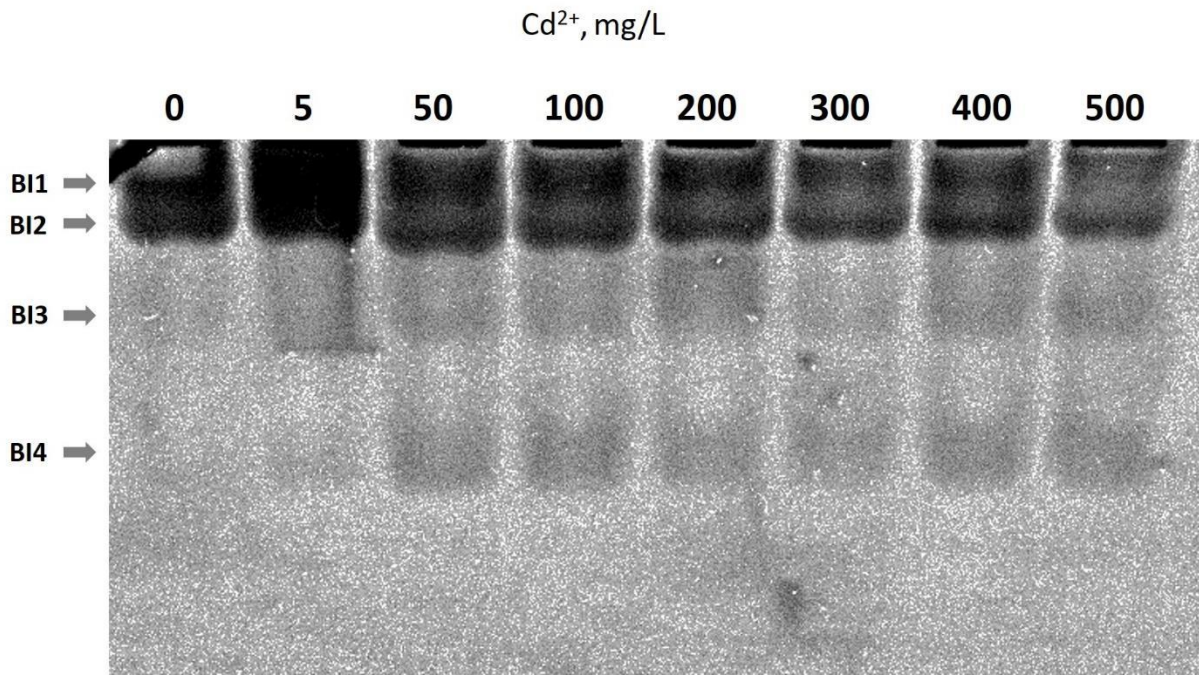


**Figure S2.** The gel profiles of total chitinases detected in roots of *Glycine max* cv. Merlin cultivated in the presence of cadmium ions and the corresponding control. Proteins were separated on SDS-PAGE and after renaturation, the fractions with chitinase activity were identified. Four isoforms of different size (in kDa) were detected and quantified.



**Figure S3.** The gel profiles of acidic/neutral chitinases detected in roots of *Glycine max* cv. Merlin cultivated in the presence of cadmium ions and the corresponding control. Proteins were separated on native-PAGE and the fractions with chitinase activity were identified. Five different isoforms were detected and quantified.





**Figure S4.** The gel profiles of basic/neutral chitinases detected in roots of *Glycine max* cv. Merlin cultivated in the presence of cadmium ions and the corresponding control. Proteins were separated on native-PAGE and the fractions with chitinase activity were identified. Four different isoforms were detected and quantified.