Accelerated Development of multiple-stress tolerAnt PoTato

Wyniki

Informacje na temat projektu

ADAPT

Identyfikator umowy o grant: 862858

Strona internetowa projektu

DOI
10.3030/862858

Projekt został zamknięty

Data podpisania przez KE
27 Czerwca 2020

Data rozpoczęcia
1 Lipca 2020

Data zakończenia
31 Października 2024

Finansowanie w ramach
SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy

Koszt całkowity
€ 4 999 973,75

Wkład UE
€ 4 999 972,00

Koordynowany przez
UNIVERSITAT WIEN
Austria

CORDIS oferuje możliwość skorzystania z odnośników do publicznie dostępnych publikacji i rezultatów projektów realizowanych w ramach programów ramowych HORYZONT.

Odnośniki do rezultatów i publikacji związanych z poszczególnymi projektami 7PR, a także odnośniki do niektórych konkretnych kategorii wyników, takich jak zbiory danych i oprogramowanie, są dynamicznie pobierane z systemu OpenAIRE.

Rezultaty

Demonstratory, piloty, prototypy (8)

Potato ‘omics data analysis pipelines

Potato ‘omics data analysis pipelines standardised and made available for the scientific community (M30)

PEDR first update and adjustment

Initial Plan for Exploitation and Dissemination of Results PEDR (M6), which will define handling of IPR issues, goals/targets of dissemination and implementation in commercial products of the breeders. This plan will be continuously updated throughout the project (M12, 24 up to M48)

PEDR established

Initial Plan for Exploitation and Dissemination of Results PEDR will define handling of IPR issues, goals/targets of dissemination and implementation in commercial products of the breeders. This plan will be continuously updated throughout the project.

PEDR second update and adjustment

Initial Plan for Exploitation and Dissemination of Results PEDR (M6), which will define handling of IPR issues, goals/targets of dissemination and implementation in commercial products of the breeders. This plan will be continuously updated throughout the project (M12, 24 up to M48)

Communication infrastructure established

Communication infrastructure established; the project website goes online to allow sharing of generated data, and general information (M6)

StressKnowledgeMap

StressKnowledgeMap: web application enabling standardised construction of integrated knowledge network and its interrogation (M15)

PEDR third update

Initial Plan for Exploitation and Dissemination of Results PEDR (M6), which will define handling of IPR issues, goals/targets of dissemination and implementation in commercial products of the breeders. This plan will be continuously updated throughout the project (M12, 24 up to M48)

Data visualisation tools updated

Data visualisation tools updated based on the updates in knowledge network (M18)

Open Research Data Pilot (1)

ORD pilot and Data Management Plan
Data Management Plan DMP implemented and guidelines for Open Research Data pilot defined M6

Dokumenty, raporty (2)

Report on field day/workshop
One joint field day and one joint workshop organized with other EU projects funded under this call or in a similar topic (M24 and M42)

Report of farmers' perception survey
Descriptive report of farmers perception survey and set of recommendations for dissemination activities M12

Publikacje

Artykuły recenzowane (24)

TGA transcription factors—Structural characteristics as basis for functional variability
Autorzy: Špela Tomaž; Špela Tomaž; Kristina Gruden; Anna Coll
Opublikowane w: Crossref, Numer 3, 2022, ISSN 1664-462X
Wydawca: Frontiers Media S. A.
DOI: 10.3389/fpls.2022.935819

Evidence-based unification of potato gene models with the UniTato collaborative genome browser
Autorzy: Maja Zagorščak, Jan Zrimec, Carissa Bleker, Nadja Nolte, Mojca Juteršek, Živa Ramšak, Kristina Gruden, Marko Petek
Opublikowane w: Frontiers in Plant Science, Numer 15, 2024, ISSN 1664-462X
Wydawca: Frontiers Media S. A.
DOI: 10.3389/fpls.2024.1352253

Assimilate highway to sink organs – Physiological consequences of SP6A overexpression in transgenic potato (Solanum tuberosum L.)
Autorzy: Günter G.Lehretz SophiaSonnewald UweSonnewald
Opublikowane w: Journal of Plant Physiology, Numer 226, 2021, Strona(/y)

153530, ISSN 0176-1617
Wydawca: Elsevier BV
DOI: 10.1016/j.jplph.2021.153530

pISA-tree - a data management framework for life science research projects using a standardised directory tree
Autorzy: Marko Petek, Maja Zagorščak, Andrej Blejec, Živa Ramšak, Anna Coll, Špela Baebler & Kristina Gruden
Opublikowane w: Scientific data, 2022, ISSN 2052-4463
Wydawca: Nature Research
DOI: 10.1038/s41597-022-01805-5

Cell-type proteomic and metabolomic resolution of early and late grain filling stages of wheat endosperm
Autorzy: Shuang Zhang, Arindam Ghatak, Mitra Mohammadi Bazargani, Hannes Kramml, Fujuan Zang, Shuang Gao, Živa Ramšak, Kristina Gruden, Rajeev K. Varshney, Dong Jiang, Palak Chaturvedi, Wolfram Weckwerth
Opublikowane w: Plant Biotechnology Journal, 2023, ISSN 1467-7652
Wydawca: John Wiley & Sons
DOI: 10.1111/pbi.14203

High Throughput Image-Based Phenotyping for Determining Morphological and Physiological Responses to Single and Combined Stresses in Potato
Autorzy: Lamis Osama Anwar Abdelhakim, Barbora Pleskačová, Natalia Yaneth Rodriguez-Granados, Rashmi Sasidharan, Lucia Sandra Perez-Borroto, Sophia Sonnewald, Kristina Gruden, Ute C. Vothknecht, Markus Teige, Klára Panzarová
Opublikowane w: Journal of Visualized Experiments, 2024, ISSN 1940-087X
Wydawca: MYJoVE Corporation
DOI: 10.3791/66255

Chloroplast redox state changes mark cell-to-cell signaling in the hypersensitive response
Autorzy: Tjaša Lukan, Anže Županič, Tjaša Mahkovec Povalej, Jacob O. Brunkard, Mirjam Kmetič, Mojca Juteršek, Špela Baebler, Kristina Gruden
Opublikowane w: New Physiologist, 2022, ISSN 1469-8137
Wydawca: John Wiley & Sons
DOI: 10.1111/nph.18425

Water stress resilient cereal crops: lessons from wild relatives
Autorzy: Toulotte JM, Pantazopoulou CK, Sanclemente MA, Voesenek LA, Sasidharan R.
Opublikowane w: Journal of Integrative Plant Biology, 2022, Strona(/y) Online ahead of print, ISSN 1365-313X
Wydawca: Wiley
DOI: 10.1111/jipb.13222

Organelles and phytohormones: a network of interactions in plant stress responses
Autorzy: Andras Bittner, Agata Cieśla, Kristina Gruden, Tjaša Lukan, Sakil Mahmud, Markus Teige, Ute C Vothknecht, Bernhard Wurzinger Author Notes
Opublikowane w: Journal of Experimental Botany, 2022, ISSN 1460-2431
Wydawca: Oxford University Press
DOI: 10.1093/jxb/erac384

Profiling of 1-aminocyclopropane-1-carboxylic acid and selected phytohormones in Arabidopsis using liquid chromatography-tandem mass spectrometry
Autorzy: Karady, Michal; Hladík, Pavel; Cermanová, Kateřina; Jiroutová, Petra; Antoniadi, Ioanna; Casanova-Sáez, Rubén; Ljung, Karin; Novák, Ondřej
Opublikowane w: Crossref, Numer 1, 2024, ISSN 1746-4811
Wydawca: BioMed Central
DOI: 10.1186/s13007-024-01165-8

Low dose ribosomal DNA P-loop mutation affects development and enforces autophagy in Arabidopsis
Autorzy: Thiruvenkadam Shanmugam, Palak Chaturvedi, Deniz Streit, Arindam Ghatak, Thorsten Bergelt, Stefan Simm, Wolfram Weckwerth & Enrico Schleiff
Opublikowane w: RNA Biology, 2023, ISSN 1555-8584
Wydawca: Taylor&Francis
DOI: 10.1080/15476286.2023.2298532

stress knowledge map: a knowledge graph resource for systems biology analysis of plant stress responses
Autorzy: Carissa Bleker, Živa Ramšak, Andras Bittner, Vid Podpečan ,Maja Zagorščak, Bernhard Wurzinger, Špela Baebler, Marko Petek, Maja Križnik, Annelotte van Dieren, Juliane Gruber, Leila Afjehi-Sadat, Wolfram Weckwerth, Anže Županič, Markus Teige, Ute C. Vothknecht, Kristina Gruden
Opublikowane w: Plant Communications, Numer Volume 5.Numer. 5,May 13, 2024, 2024, ISSN 0092-8674
Wydawca: Cell Press
DOI: 10.1016/j.xplc.2024.100920

A helping hand when drowning: The versatile role of ethylene in root flooding resilience
Autorzy: Hendrika A.C.F. Leeggangers 1, Natalia Yaneth Rodriguez-Granados 1, Monika Gyöngyi Macias-Honti 1, Rashmi Sasidharan
Opublikowane w: Environmental and Experimental Botany, 2023, ISSN 1873-7307
Wydawca: Elsevier B.V.
DOI: 10.1016/j.envexpbot.2023.105422

A mini-TGA protein modulates gene expression through heterogeneous association with transcription factors

Autorzy: Špela Tomaž, Marko Petek, Tjaša Lukan, Karmen Pogačar, Katja Stare, Erica Teixeira Prates, Daniel A Jacobson, Jan Zrimec, Gregor Bajc, Matej Butala, Maruša Pompe Novak, Quentin Dudley, Nicola Patron, Ajda Taler-Verčič, Aleksandra Usenik, Dušan Turk, Salomé Prat, Anna Coll, Kristina Gruden
Opublikowane w: Plant Physiology, 2023, ISSN 0032-0889
Wydawca: American Society of Plant Biologists
DOI: 10.1093/plphys/kiac579

Cold plasma within a stable supercavitation bubble – A breakthrough technology for efficient inactivation of viruses in water

Autorzy: Arijana Filipić a, David Dobnik a, Ion Gutiérrez-Aguirre a, Maja Ravnikar a, Tamara Košir a, Špela Baebler a, Alja Štern b, Bojana Žegura b, Martin Petkovšek c, Matevž Dular c, Miran Mozetič d, Rok Zaplotnik d, Gregor Primc d
Opublikowane w: Enviroment International, 2023, ISSN 1873-6750
Wydawca: PERGAMON-ELSEVIER SCIENCE LTD.
DOI: 10.1016/j.envint.2023.108285

Spatial control of potato tuberization by the TCP transcription factor BRANCHED1b

Autorzy: Michael Nicolas 1 , Rafael Torres-Pérez 2 , Vanessa Wahl 3 , Eduard Cruz-Oró 4 , María Luisa Rodríguez-Buey 4 , Angel María Zamarreño 5 , Beatriz Martín-Jouve 6 , José María García-Mina 5 , Juan Carlos Oliveros 2 , Salomé Prat 4 7 , Pilar Cubas 8
Opublikowane w: Nature plants, 2022, ISSN 2055-0278
Wydawca: Nature Publishing Group
DOI: 10.1038/s41477-022-01112-2.

Farmers Feel the Climate Change: Variety Choice as an Adaptation Strategy of European Potato Farmers

Autorzy: Philipp von Gehren 1, Svenja Bomers 1, Tanja Tripolt 2, Josef Söllinger 3, Noémie Prat 1, Berta Redondo 4, Romans Vorss 4, Markus Teige 5 , Anita Kamptner 6 and Alexandra Ribarits 1,*
Opublikowane w: Climate, 2023, ISSN 2225-1154
Wydawca: MDPI
DOI: 10.3390/cli11090189

Allelic variants of a potato HEAT SHOCK COGNATE 70 gene confer improved tuber yield under a wide range of environmental conditions

Autorzy: Raymond Campbell, Laurence Ducreux, Graham Cowan, Vanessa Young, Gift Chinoko, Gloria Chitedze, Stanley Kwendani, Margaret Chiipanthenga, Craita E. Bita, Obed Mwenye, Hassan Were, Lesley Torrance, Sanjeev Kumar Sharma, Robert D. Hancock, Glenn J. Bryan, Mark Taylor
Opublikowane w: Food and Energy Security, 2022, ISSN 2048-3694

Wydawca: John Wiley & Sons
DOI: 10.1002/fes3.377

Identification of heat stress-related genomic regions by genome-wide association study in Solanum tuberosum

Autorzy: Alexander Kaier, Selina Beck, Markus Ingold, José María Corral, Stephan Reinert, Uwe Sonnewald, Sophia Sonnewald
Opublikowane w: Genomics, Numer 116, 2024, Strona(/y) 110954, ISSN 0888-7543
Wydawca: Academic Press
DOI: 10.1016/j.ygeno.2024.110954

Biosensors: A Sneak Peek into Plant Cell's Immunity

Autorzy: Valentina Levak 1,2,*, Tjaša Lukan 1 , Kristina Gruden 1 and Anna Coll 1
Opublikowane w: Life, 2021, ISSN 2075-1729
Wydawca: MDPI
DOI: 10.3390/life11030209

<scp>StCDF1</scp>: A 'jack of all trades' clock output with a central role in regulating potato nitrate reduction activity

Autorzy: Maroof Ahmed Shaikh, Lorena Ramírez-Gonzales, José M. Franco-Zorrilla, Evyatar Steiner, Marian Oortwijn, Christian W. B. Bachem, Salomé Prat
Opublikowane w: New Phytologist, Numer 245, 2025, Strona(/y) 282-298, ISSN 0028-646X
Wydawca: Blackwell Publishing Inc.
DOI: 10.1111/nph.20186

Paintomics 4: new tools for the integrative analysis of multi-omics datasets supported by multiple pathway databases

Autorzy: Tianyuan Liu1, Pedro Salguero2, Marko Petek 3, Carlos Martinez-Mira4, Leandro Balzano-Nogueira5, Zˇiva Ramsˇak 3, Lauren McIntyre6, Kristina Gruden3, Sonia Tarazona2 and Ana Conesa
Opublikowane w: Nucleic Acid Research, 2022, Strona(/y) Pages W551–W559, ISSN 1362-4962
Wydawca: Oxford University Press
DOI: 10.1093/nar/gkac352

Phased, chromosome-scale genome assemblies of tetraploid potato reveals a complex genome, transcriptome, and predicted proteome landscape underpinning genetic diversity

Autorzy: Genevieve Hoopes, Xiaoxi Meng, John P. Hamilton, Sai Reddy Achakkagari, Fernanda de Alves Freitas Guesdes, Marie E. Bolger, Joseph J. Coombs, Danny Esselink, Natalie R. Kaiser, Linda Kodde, Maria Kyriakidou, Brian Lavrijssen, Natascha van Lieshout, Rachel Shereda, Heather K. Tuttle,

Brieanne Vaillancourt, Joshua C. Wood, Jan M. de Boer, Nolan Bornowski, Peter Bourke, David Douches, Herman J. van E
Opublikowane w: MOLECULAR PLANT, Numer Online ahead of print, 2022, ISSN 1674-2052
Wydawca: Oxford University Press
DOI: 10.1016/j.molp.2022.01.003

Intertwined Roles of Reactive Oxygen Species and Salicylic Acid Signaling Are Crucial for the Plant Response to Biotic Stress
Autorzy: Tjaša Lukan and Anna Coll
Opublikowane w: Molecular Science, 2022, ISSN 1422-0067
Wydawca: Multidisciplinary Digital Publishing Institute (MDPI)
DOI: 10.3390/ijms23105568

Rozdziały książek (3)

Toward the Design of Potato Tolerant to Abiotic Stress
Autorzy: Raymond Campbell, Laurence J. M. Ducreux, Elena Mellado-Ortega, Robert D. Hancock & Mark A. Taylor
Opublikowane w: Solanum tuberosum - Methods and Protocols, 2021, Strona(/y) pp 387–399, ISBN 978-1-0716-1609-3
Wydawca: Humana, New York, NY
DOI: 10.1007/978-1-0716-1609-3_19

Methodologies for Discovery and Quantitative Profiling of sRNAs in Potato
Autorzy: DOBNIK, David, GRUDEN, Kristina, RAMŠAK, Živa, COLL RIUS, Anna
Opublikowane w: Methods in molecular biology, Numer 2354, 2021, ISBN 978-1-0716-1609-3
Wydawca: Humana Press, cop.
DOI: 10.1007/978-1-0716-1609-3_11

RNA Sequencing Analyses for Deciphering Potato Molecular Responses
Autorzy: Živa Ramšak, Marko Petek & Špela Baebler
Opublikowane w: Solanum tuberosum - Methods and Protocols, 2021, Strona(/y) pp 57–94
Wydawca: Humana, New York, NY
DOI: 10.1007/978-1-0716-1609-3_3

Materiały z konferencji (2)

ADAPT –Accelerated development of multiple-stress tolerant potato
Autorzy: Ribarits A, von Gehren P, Bomers S, Prat N, Tripolt T, Söllinger J
Opublikowane w: Vereinigung der Pflanzenzüchter und Saatgutkaufleute Österreichs (Ed), 71. Jahrestagung 2020, 2021, Strona(/y) 35-36
Wydawca: BOKU-University of Natural Resources and Life Sciences

DAP-Seq Identification of Transcription Factor-Binding Sites in Potato
Autorzy: José M. Franco-Zorrilla & Salomé Prat
Opublikowane w: Solanum tuberosum - Methods and Protocols, 2021, Strona(/y) pp 123–142, ISBN 978-1-0716-1609-3
Wydawca: Humana, New York, NY
DOI: 10.1007/978-1-0716-1609-3_6

Monografie (1)

Solanum tuberosum - Methods and Protocols
Autorzy: David Dobnik, Kristina Gruden, Živa Ramšak, Anna Coll
Opublikowane w: Solanum tuberosum - Methods and Protocols, 2021, ISBN 978-1-0716-1609-3
Wydawca: Humana New York, NY
DOI: 10.1007/978-1-0716-1609-3

Oprogramowanie

Oprogramowanie za pośrednictwem OpenAIRE (1)

pISA-tree
Autorzy: Blejec, Andrej; Gruden, Kristina
Wydawca: bio.tools

Ostatnia aktualizacja: 4 Czerwca 2025

Permalink: https://cordis.europa.eu/project/id/862858/results/pl