ADER 3.2.1. RESEARCHES ON THE STRUCTURE OF HYBRID POPULATIONS, ON THE HEREDITY OF CHARACTERISTICS AND GENETIC DETERMINISM ON FRUIT SPECIES

RESEARCH INSTITUTE FOR FRUIT GROWING PITEȘTI-MĂRĂCINENI-
COORDINATOR
PROJECT DIRECTOR: Dr. Irina Titirica

UNIVERSITY OF AGRICULTURAL SCIENCES AND VETERINARY MEDICINE CLUJ-
NAPOCA - PARTNER 1
RESPONSIBLE FOR THE PROJECT: Dr. Adriana Sestras
OBJECTIVE OF THE PROJECT

RESEARCHES ON THE STRUCTURE OF HYBRID POPULATIONS, THE HEREDITY OF CHARACTERISTICS AND GENETIC DETERMINISM IN FRUIT SPECIES

Budget of the project 859,585 lei
RESULTS OBTAINED

I. Genetic variability database for breeders

II. Lists with genotypes useful for breeding programs

III. Working visits in the breeding fields

IV. Establishing new selection fields

V. Scientific articles
I. Genetic variability database for breeders

- **Hybrid combinations studied:**
  
  **Strawberry:**
  - Benton x Cambridge Favourite,
  - Benton x Marmolada,
  - Clery x Honeoye,
  - Alba x Premial,
  - Premial x Miss,
  - Record x Premial,
  - Premial x Record,
  - Mira x Honeoye,
  - Marmolada x Benton,
  - Mira x Premial,
  - Elsanta x Cambridge Favourite,
  - Mira x Idea.

  **Currant:** Werdavia x Janker van Tets
  - Red Pol x Janker van Tets
  - Bona x Abanos
  - Lopper Summer x Red Poll

- **Blueberry:**
  - Patriot x Coville,
  - Blueray x Coville;
  - Dixi x Bluecrop;
  - Bluecrop x Duke

- **Blackberry:**
  - LochNess x Arapaho
  - Arapaho x LochNess
  - LochNess x; Navaho
  - Hull x Darrow; Arapaho x Hellen
• Raspberry:
  • Tulameen x Autumn
  • Bliss Glen Moy x Tullamen
  • Wilamette x Veten
  • Tulameen x Pathfinder
  • Tulameen x Opal
  • Titan x Glen Prosen

• Apple were evaluated 62 genotypes and 31 genotypes of pear were evaluated

• Plum:
  • Agen x Diana,
  • Centenar x Early Rivers,
  • Centenar x Silvia,
  • Minerva x Agen,
  • Minerva x Bluefree,
  • Record x Stanley,
  • Record x Early Rivers,
  • Tita x Stanley,
  • Tuleu timpuriu x Early Rivers,
  • Tuleu timpuriu x Ruth Gerstetter,
  • Tuleu timpuriu x Stanley,
  • Tuleu gras x Grase românești,
  • Tuleu gras x Stanley,
  • Tuleu gras x Silvia,
  • Stanley x Agen.
II. Lists with genotypes useful for breeding programs

• List with genotypes useful for apple and pear breeding programs

• List with genotypes useful for plum breeding programs

• List with genotypes useful for currant breeding programs

• List with genotypes useful for raspberry breeding programs

• List with genotypes useful for blackberry breeding programs

• List with genotypes useful for cornelian cherry breeding programs

• List with genotypes useful for strawberry breeding programs
III. WORKING VISITS IN THE BREEDING FIELDS
IV. ESTABLISHING NEW SELECTION FIELDS

• Plot 27 L- blackberry seedling field
• Plot 13 L – raspberry seedling field
• Plot 17 L- raspberry seedling field
• Plot 29 L – field trial exotics species
• Parcela 28 L- chockeberry seedling field
• Parcela 12 L – currant seedling field
• Parcela 12 L1- bluehoneysuckle seedling field
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<td>2</td>
<td>III INTERNATIONAL SYMPOSIUM ON HORTICULTURE IN EUROPE – SHE 2016</td>
<td>EVALUATION OF THE POSTHARVEST QUALITY INDICATORS OF SOME STRAWBERRY CVS</td>
<td>Sturzeanu M., Coman M., Ancu I</td>
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<td>INTERNATIONAL EXPERTS GROUP EUFRUIT, Belgia, Sint-Truiden 23. 04 – 26. 04.2018</td>
<td>PERFORMANCE OF ROMANIAN BERRIES VARIETIES</td>
<td>Ancu (Titirică) Irina</td>
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<td>1.</td>
<td>Ancu (Titirică) I., Monica Sturzeanu</td>
<td>THE FRUIT QUALITY CHARACTERISTICS TO SOME VALUABLE BLACK CURRANS SELECTIONS</td>
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<td>STUDY OF SOME FRUIT QUALITY CHARACTERISTICS TO SOME CORNELIAN CHERRY BIOTYPE</td>
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<td>Titirică Irina, Sestras Adriana, Sturzeanu Monica</td>
<td>STUDY OF SOME PROGENIES (F1) FROM RIBES SPP</td>
<td>Fruit Growing Research, Vol. XXXIV, in curs de publicare</td>
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ADER 3.2.1 / 2015 - 2018