Contractor: Research and Development Institute for Viticulture and Enology, Valea Calugareasca

The overall objective: ADER

Contract: 3.2.5./2015

Project start date: 16.10.2015
Project end date: 30.10.2018

Project: DIVERSIFICATION OF THE VITICULTURAL ASSORTMENT FOR TABLE AND WINE GRAPES

Contact person (Project director): Dr. biologist Elena BRINDUSE

Duration (months): 38

Contact data (tel/fax, e-mail):
0244401901/0244401902 elabrinuse@yahoo.com
PARTNERSHIP

COORDINATOR: RESEARCH AND DEVELOPMENT INSTITUTE FOR VITICULTURE AND ENOLOGY, VALEA CALUGAREASCA

Partner 1: RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, BLAJ
Partner 2: RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, BUJORU
Partner 3: RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, IASI
Partner 4: RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, MINIS
Partner 5: RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, ODOBESTI
Partner 6: NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR BIOTECHNOLOGY IN HORTICULTURE, ȘTEFĂNEȘTI ARGEȘ
Partner 7: UNIVERSITY OF AGRONOMIC SCIENCES AND VETERINARY MEDICINE OF BUCHAREST – RESEARCH AND DEVELOPMENT STATION FOR VITICULTURE AND ENOLOGY, PIETROASA
The overall objective

Sustainable exploitation of the genetic resources diversity in order to improve the viticultural assortment for table and wine grapes, the continuous improvement and the preservation of the existing vinegrowing genofond.
ADER 3.2.5/ EXPECTED RESULTS

- Approval and patenting of a minimum of 2 varieties and/or 2 clonal selections for table and wine grapes, better adapted to different pedoclimatic conditions;
- To highlight the agrobiological and technological particularities of the varieties created in the research activity in order to extend their zoning area; Analysis of clonal elites and valuable hybrid combinations located in the experimental fields in order to select the best ones;
- Promotion of new varieties obtained by Romanian researchers in recent years on the market;
- Organization of demonstration lots, workshops and work visits for identifying the potential beneficiaries.
ADER 3.2.5/ RESULTS OBTAINED

Two grapevine varieties, VRANCEA and MEMORY, and the clone for winemaking BABEASCA NEAGRA 8 Bj. approved and patented.
VRANCEA - (Traminer x Armaș) x Fetească regală

THE MAIN CHARACTERISTICS

- **epoch of grapes maturation**: V
- **resistance to diseases and damages**: good and very good tolerance to pathogen attack
- **the vigor of stump growth**: medium
- **fertility**: high (74 - 91% fertile twigs)
- **productivity**: high (IPR 206; IPA-246)
- **weight of the grapes**: 130 - 210 g
- **potential for the sugar accumulation in the must**: 192 - 223 g/l
- **total acidity of the must**: 3.58 g/l (express in H₂SO₄)
- **production direction**: grapes for winemaking
VRANCEA - (Traminer x Armaș) x Fetească regala
MEMORY (Augusta self pollination)

THE MAIN CHARACTERISTICS

- epoch of grapes maturation: II
- resistance to diseases and damages: good tolerance to pathogen attack
- the vigor of stump growth: medium
- fertility: medium (50 - 62% fertile twigs)
- productivity: medium
- weight of the grapes: 370 - 500 g;
- potential for the sugar accumulation in the must: 145 - 155 g/l
- total acidity of the must: 2.7 – 3.2 g/l (express in H₂SO₄);
- production direction: grapes for table
MEMORY (Augusta self pollination)
THE MAIN CHARACTERISTICS

- **epoch of grapes maturation**: III-IV
- **resistance to diseases and damages**: good tolerance to pathogen attack
- **the vigor of stump growth**: medium
- **fertility**: medium (59%-65% fertile twigs)
- **productivity**: medium (IPR 79.6; IPA - 257)
- **the weight of the grapes**: 210 - 226 g;
- **potential for the sugar accumulation in the must**: 200 – 226 g/l
- **total acidity of the must**: 6.5 g/l (express in H₂SO₄);
- **production direction**: grapes for winemaking
ADER 3.2.5/ RESULTS OBTAINED

SELECTION OF FIVE VALUABLE GRAPEVINE CLONAL ELITES WHICH WILL BE FURTHER STUDIED IN ORDER TO APPROVED THEM.
Clonal elite CHASSELAS DORÉ 25-5-1 VI.

THE MAIN CHARACTERISTICS

✓ epoch of grapes maturation: III-IV
✓ resistance to diseases and damages: good and very good tolerance to pathogen attack
✓ the vigor of stump growth: medium to high
✓ fertility: medium (65%-70% fertile twigs)
✓ productivity: medium (IFA 174; IPA- 268)
✓ weight of the grapes: 218 - 310 g;
✓ potential for the sugar accumulation in the must: 200 – 236 g/l, exceeding Chasselas Doré variety by 20% – 25%;
✓ total acidity of the must: 5.3 g/l (express in $\text{H}_2\text{SO}_4$);
✓ production direction: grapes for table.
Clonal elite 15-43 Merlot

THE MAIN CHARACTERISTICS

- **epoch of grapes maturation**: IV - V
- **resistance to diseases and damages**: good tolerance to pathogen attack
- **the vigor of stump growth**: medium
- **fertility**: medium (67%-75% fertile twigs)
- **productivity**: medium (IPR 115; IPA-171)
- **the weight of the grapes**: 98 - 116 g
- **potential for the sugar accumulation in the must**: 205 – 252 g/l
- **total acidity of the must**: 5.3 g/l (express in H₂SO₄)
- **production direction**: grapes for winemaking
CLONAL ELITE PINOT GRIS 5.7.5.

THE MAIN CHARACTERISTICS

- epoch of grapes maturation: IV-V
- resistance to diseases and damages: good and very good tolerance to pathogen attack
- the vigor of stump growth: low to medium
- fertility: good (over 70% fertile twigs)
- productivity: low (IPR 100; IPA- 120)
- the weight of the grapes: 80 - 110 g;
- potential for the sugar accumulation in the must: 220 – 234 g/l
- total acidity of the must: 4.3 g/l (express in H₂SO₄);
- production direction: grapes for winemaking
THE MAIN CHARACTERISTICS

- **epoch of grapes maturation**: V
- **resistance to diseases and damages**: good tolerance to pathogen attack
- **the vigor of stump growth**: high
- **fertility**: good (over 70% fertile twigs)
- **the weight of the grapes**: 100 - 125 g;
- **potential for the sugar accumulation in the must**: 198 – 210 g/l
- **total acidity of the must**: 4.6 – 6.5 g/l (express in H$_2$SO$_4$);
- **production direction**: grapes for winemaking
THE MAIN CHARACTERISTICS

- **epoch of grapes maturation**: IV-V
- **resistance to diseases and demages**: good and very good tolerance to pathogen attack
- **the vigor of stump growth**: medium
- **fertility**: hugh (70 - 85% fertile twigs)
- **the weight of the grapes**: 210 - 225 g;
- **potential for the sugar accumulation in the must**: 220 g/l
- **total acidity of the must**: 5.8 g/l (express in $\text{H}_2\text{SO}_4$);
- **production direction**: grapes for winemaking.
## Demonstrative plot with grapevine varieties and clones

<table>
<thead>
<tr>
<th>Variety/Clone</th>
<th>Number of plants</th>
<th>The production direction</th>
<th>The unit that approved the variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perla de Feredeu</td>
<td>15</td>
<td>grapes for table</td>
<td>SCDVV Minis</td>
</tr>
<tr>
<td>Oltean</td>
<td>7</td>
<td>grapes for table</td>
<td>USAMV Craiova</td>
</tr>
<tr>
<td>Auriu de Stefanesti</td>
<td>15</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Norocel (Gelia)</td>
<td>15</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Memory (GPGS 40)</td>
<td>15</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>H2 GPGS 40</td>
<td>15</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>DK 19-64</td>
<td>15</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Mihaela</td>
<td>15</td>
<td>grapes for table</td>
<td>SCDVV Pietroasa</td>
</tr>
<tr>
<td>Bujoru</td>
<td>7</td>
<td>grapes for table</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Oana</td>
<td>15</td>
<td>grapes for table</td>
<td>SCDVV Bujoru</td>
</tr>
<tr>
<td>Tamaioasa romaneasca 36 Pt.</td>
<td>15</td>
<td>grapes for table</td>
<td>SCDVV Pietroasa</td>
</tr>
<tr>
<td>Muscat Ottonel 16 Pt.</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>SCDVV Pietroasa</td>
</tr>
<tr>
<td>Feteasca alba 2 St.</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Sarba 2 St.</td>
<td>11</td>
<td>grapes for winemaking</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Sirian</td>
<td>4</td>
<td>grapes for winemaking</td>
<td>SCDVV Minis</td>
</tr>
<tr>
<td>Feteasca neagra 6 St.</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Pinot noir 3 St.</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>INCDBH Stefanesti</td>
</tr>
<tr>
<td>Magura</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>SCDVV Blaj</td>
</tr>
<tr>
<td>Sarbă 3 Od.</td>
<td>15</td>
<td>grapes for winemaking</td>
<td>SCDVV Blaj</td>
</tr>
</tbody>
</table>
DISSEMINATION

✓ Workshop – Research and Development Institute for Viticulture and Enology, Valea Călugărească, August 29, 2018

✓ Workshop - Research and Development Station for Viticulture and Enology Odobești, September 12, 2018
DISSEMINATION

- International Conference "Agriculture for Life, Life for Agriculture", organized by the University of Agronomic Sciences and Veterinary Medicine of Bucharest between 7th and 9th June 2018.
- International Symposium” Prospects for the 3rd Millennium Agriculture” organized by the University of Agronomic Sciences and Veterinary Medicine of Cluj Napoca between 27th and 29th September, 2018;
- Conference “Agriculture and Romanian space (1918-2018), Situation and evolution”, organized by ASAS Bucharest in partnership with Romanian Academy, on 30th August, 2018;
- Scientific Session of the XIth Congress of Romanian Society of Horticulturist, 4th October, 2018;
- Technical scientific manifestation „Romanian viticulture in the centenary year”, organized by ASAS Bucuresti in collaboration with SCDVV Odobesti, on September 12th.
<p>| Authors                                                                 | Paper                                                                                           |
|------------------------------------------------------------------------|                                                                                                |
| Anca Cristina Babeş, Maria Iliescu, Liliana Lucia Tomoiaga             | The behaviour of some grape hybrid elite varieties obtained at SCDVV Blaj, during 2014-2015    |
| Ciobotea C.M., Popa C.                                                  | Assessment of the agrobiological qualities of some intraspecific hybrid elites for the table grapes compared with the parental forms by the method of the distribution on the frequency classes |
| Elena Dumitru, Arina Oana Antoce                                       | A new early ripening table grape cultivar obtained in Pietroasa Research Station: VITIS VINIFERA CV. MIHAELA |
| Elena Brînduse, Marian Ion, Cristian Burlacu, Lidia Ficiu, Vlad Andrei Filip | Agrobiological And Technological Evaluation Of Chasselas Doré Elite Clonal Accessions           |
| Elena Brînduse, Marian Ion, Cristian Burlacu, Lidia Ficiu, Vlad Andrei Filip | Ampelographic Characterization Of Some Chasselas Doré Elite Clonal Accessions                   |
| Damian Doina, Filimon Roxana, Nechita Ancuţa, Filimon R.              | Agrobiological and technological characterisation of some clonal elites for wine grapes obtained within S.C.D.V.V. Iaşi |
| Marioara Puşcalău, Ionica Bosoi, Gh. Mihu.                            | Evaluation of the agrobiological and technological potential of some hybrid elites obtained at S.C.D.V.V. Odobeşti, for the approval and improvement of the national product in the context of sustainable viticulture |
| Onache Petronela Anca                                                 | Qualitative assessment of Pinot Noir 3 St, Feteasca Neagra 6 St, Cabernet Sauvignon 131 St, clones approved at the wine center Stefanesti |
| Ionica Bosoi, Marioara Puşcalău                                       | Vrancea - new variety for high quality white wines created at S.C.D.V.V. ODOBESTII              |
| Maria Iliescu, Alexandru Rusu, Horia Răcoare, Liliana Tomoiagă, Anca Babes | Studies on the influence of climatic conditions in the years 2015-2017, on the behaviour of the main vinifera varieties in the Târnave vineyard |</p>
<table>
<thead>
<tr>
<th>Authors</th>
<th>Paper</th>
<th>Publishing house</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Ion, V. Filip, Elena Brinduse</td>
<td>New varieties for table and wine grapes created by Romanian wine research</td>
<td>Georgian Academy of Agricultural Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International Scientific Conference</td>
</tr>
<tr>
<td>Cristian Burlacu, Cezarina Necula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anamaria Călugăr, Anca Cristina Babeș,</td>
<td>Oenological characterization of wines from grape clones created at R.S.V.E. Blaj, Alba County, Romania</td>
<td>International Symposium “Modern horticulture, achievements and perspectives”, Agrarian State University from Moldova Republic.</td>
</tr>
<tr>
<td>Claudiu Ioan Bunea, Tiberia Ioana Pop,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liliana Tomoiagă, Maria Iliescu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lavinia Moldovan, Anamaria Călugăr, Liliana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomoiagă, Maria Iliescu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>