“Evaluation of germplasm from International Centers in Georgia”

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Contents

1. The germplazm evaluation activities and results;
2. Cooperation with the CGIAR centers and the CAC countries
3. Future plans
Improved germplasm

20,000 accessions
wheat, barley, maize, chickpea, lentil, potato, vegetables

Wheat Gremplasm

- 19 FAWWON-SA;
- 19 FAWWON-IR;
- 14 IWWYT-SA;
- 15 IWWYT-IR; WWYRRN;
- 3 WWSRRN;
- 11 RWKLDN;
- 6 IYRTN;
- 7 ISRTN;
- 6 STEMRRSN
## Registered Wheat Varieties

<table>
<thead>
<tr>
<th>Variety Name</th>
<th>Pedigree</th>
<th>Year of Release</th>
<th>Hectares planted to the variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lomtagora 123</td>
<td>FRTL/Nemura – 7EYT-IRR-9823</td>
<td>2010</td>
<td>10 000</td>
</tr>
<tr>
<td>Lomtagora 109</td>
<td>Shark/F4105W.21 – 7EYT-IRR-9809</td>
<td>2011</td>
<td>5 000</td>
</tr>
<tr>
<td>Sauli 9</td>
<td>SAULESKU#44/TR810222 8EYT-SA - 9</td>
<td>2011</td>
<td>-</td>
</tr>
<tr>
<td>Lomtagora 149</td>
<td>TNMU6/PEL 74144/4/KVZ//AN</td>
<td>2012</td>
<td>-</td>
</tr>
</tbody>
</table>

### Crop pathology research

- Virulence of wheat yellow rust (YR) & stem rust (SR)
- No resistance to SR in local wheat germplasm
- Resistant wheat germplasm through special SR nurseries
Field days and traveling seminars

Grain legumes

- Appreciation of grain legumes is increasing in Georgia due to need for efficient rotation;
- Elexir (Chickpea) and Pablo (lentil).
Potato germplasm

- Clones from CIP adapted to longer day light and resistant to LB;
- Two New varieties are getting to register.

Improved maize varieties

- Good combining ability of CIMMYT inbred lines with local material;
- Good adaptation to lowland conditions (long vegetation season 130-140 days)
- Two hybrids have been registered. One has white kernel and good “maize bread” baking and “porridge” quality,
Vegetable Breeding

Germplasm received from AVRDC
- Sweet pepper
- Eggplant
- Soybean
- Tomato

Some varieties released

Current projects

- Characterization of Georgian wheat germplasm for morpho-physiological traits, yield, quality and disease resistance;

- Georgian legume germplasm characterization study
Cooperation Areas with CGIAR

- Plant Genetic Resources
- Plant Breeding
- Natural Resource Management
- Livestock Research
- Capacity Building
- Policy Advice

Future cooperation with CGIAR

- Germplasm exchange: wheat, barley, legumes (grain and forage), vegetables, potato and maize
- Joint research on crop management practices
- Efficient use of natural resources
- Training including joint degree programs
- Building regional and international partnerships
Thank you.

Questions…