## Season Specific Bivoltine Lines

### For More Productive Silkworm Hybrids

<table>
<thead>
<tr>
<th>Jan-Feb</th>
<th>Mar-Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMMMSU 108</td>
<td>DMMMSU 100</td>
</tr>
<tr>
<td>DMMMSU 100</td>
<td>DMMMSU 107</td>
</tr>
<tr>
<td>DMMMSU 107</td>
<td>DMMMSU 103</td>
</tr>
<tr>
<td>DMMMSU 101</td>
<td>DMMMSU 102</td>
</tr>
<tr>
<td>DMMMSU 111</td>
<td>DMMMSU 115</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jul-Aug</th>
<th>Sept</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMMMSU 111</td>
<td>DMMMSU 109</td>
<td>DMMMSU 110</td>
</tr>
<tr>
<td>DMMMSU 110</td>
<td>DMMMSU 103</td>
<td>DMMMSU 100</td>
</tr>
<tr>
<td>DMMMSU 119</td>
<td>DMMMSU 107</td>
<td>DMMMSU 109</td>
</tr>
<tr>
<td>DMMMSU 109</td>
<td>DMMMSU 108</td>
<td>DMMMSU 119</td>
</tr>
<tr>
<td>DMMMSU 100</td>
<td>DMMMSU 100</td>
<td>DMMMSU 101</td>
</tr>
</tbody>
</table>

---

### Parental Breeds Compatible to Crop Season Specify Silk Yield and Quality

1. Parental breeds compatible to crop season specify silk yield and quality.
2. Allows for maximum expression of genetic potential of the breed.

---

For more information, pls. contact:

**CRISTETA F. GAPUZ, Ph.D**
OIC-Director
DMMMSU-SRDI, Bacnotan, La Union
Tel. no (072)-242-11-17
cfgapuz@yahoo.com
The increasing demand for quality silk fabrics has prompted DMMMSU-SRDI to develop bivoltine races with primary emphasis on productivity.

The harsh tropical climate characterized with wide and sudden climatic fluctuations warrants more flexible breeds for which proper identification of initial parents is very much essential as resource breeding material for more productive and stable bivoltine hybrids.

**OBJECTIVES**

- Establish seasonal performance of bivoltine silkworm purelines on economic traits.
- Identify suitable bivoltine lines based on economic qualities in different seed crop seasons.

**MATERIALS & METHODS**

**I. Treatments**

- DMMMSU101
- DMMMSU103
- DMMMSU107
- DMMMSU109
- DMMMSU111
- DMMMSU110
- DMMMSU113
- DMMMSU102
- DMMMSU100

**II. Performance evaluation of Bivoltine Silkworm Purelines for 12 generations, 2003-2010, on four economic traits.**

1. Effective rearing rate (ERR)
2. Cocoon yield box\(^2\) (CYB\(^2\))
3. Single cocoon weight (SCW)
4. Cocoon shell percentage (CSP)

**III. Experimental Design**

CRD with 3 replications

**IV. Selection for season specific bivoltine lines using the following statistical tools:**

- Combined ANOVA
- Multiple Trait Evaluation Index Method