Proceedings of the
65th
ANNUAL CONVENTION
on 22 – 24 August, 2003
Bhubaneshwar - 751 003 Orissa, India

Published by :
THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA
C-Block, 2nd Floor, Ansal Plaza, August Kranti Marg, New Delhi - 110 049
Tel. : 91-11-26263695, 26263850 Fax : 91-11-26263694
Email : staidel@vsnl.com Website : www.staionline.org
CONTENTS

PLENARY SESSION

1. Raw Sugar Manufacture in India – An Overview - 3–11
   by R.B. Nigam, S.K. Gupta and Narendra Mohan

AGRICULTURE SECTION

1. Evaluation of Saccharum Species for Uptake, 3–17
   Partitioning and Accumulation of Phosphorus -
   by A.K. Shrivastava, N. Kulshreshtha, M. Singh,
   R. Darash, S.P. Shukla, B.B. Joshi and S. Solomon

2. Effect of Mulching and Integrated Nutrient 18–30
   Management in Rainfed Sugarcane -
   by P. Jamuna, K. Ramalinga Swamy,
   N.V. Naidu and K. Subrahmanyam

3. Trends of Area, Production and Productivity 31–42
   of Sugarcane in Maharashtra State -
   by B.J. Takalkar and A.N. Salunkhe

4. Economisation of Sugarcane and Sugar 43–55
   Production in India -
   by Dr. R.P. Singh

5. Future Prospects of Mechanical Harvesting of 56–74
   Sugarcane in India : An Approach -
   by R.N.S. Yadav, Sandeep Yadav and
   Raj Kumar Tejra

(ix)
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Evaluation of Two Rearing Methods of <em>Cotesia Flavipes</em> Cameron (Hymenoptera: Braconidae), A Parasitoid of Sugarcane Borers - by J. Srikanth, S. Easwaramoorthy, M. Shanmugasundaram and R. Kumar</td>
<td>75-96</td>
</tr>
<tr>
<td>7</td>
<td><em>In Vitro</em> Sucrose Uptake by Internodal Slices of Sugarcane Genotypes Varying in Maturity and Sucrose Accumulation Potential - by Prem S. Attan, J.P.S. Dendsay and A.K. Dhawan</td>
<td>97-109</td>
</tr>
<tr>
<td>8</td>
<td>Achieving Potential Productivity - A Means to Reduce Cost of Sugarcane Cultivation - by R. Thiagarajan, Rajula Chandran, R. Velusamy and N. Jawahar</td>
<td>110-124</td>
</tr>
<tr>
<td>9</td>
<td>Technology for Increasing Yield of Late Planted Sugarcane After Wheat-Sugarcane Cropping System in Punjab - by M. S. Bhullar, M. L. Kapur, S. Singh, Anita Kamboj and L.K. Saini</td>
<td>125-130</td>
</tr>
<tr>
<td>12</td>
<td>Clean Cane “An Engine” for High Recovery - by M. Krishnan</td>
<td>142-154</td>
</tr>
<tr>
<td>13</td>
<td>Evaluation of Promising Varieties for Growth, Yield, Quality and Internode Borer incidence in South Tamil Nadu - by J. Stephen Arul and A.C. Prabagar</td>
<td>155-167</td>
</tr>
</tbody>
</table>
14. Response of New Sugarcane Varieties to Wide Row Spacing - by Dr. B. Sundara


**MANUFACTURING SECTION**

1. Mechanical Clarification of Cane Juice - by R. B. Nigam, Satish K. Gupta, Sandeep K. Mitra and P. Sanyal

2. Colour, Turbidity and Colourants of Sugar Products : Current Scenario - by Kaman Singh, S.B. Sharma and Sudhanshu Mohan

3. CaO Rise from Mixed Juice to Clear Juice - by D.P. Gupta and Deep Malik

4. 5 Years Experience with Magnetisers in Sugar Industry - by I. Hanumantha Rao

5. Reviewing Specific Evaporation Coefficient for Pans and Evaporators Last Body Keeping in View Lower Power Consumption in S.S. Single Entry Multijet Condensers with A Case Studies Based on Observations - by A.K. Nanda, B.K. Shukla and Mehak Singh
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Fuzzy Logic Based Control System Enter Sugar Industry - by K.K. Sharma, H.C. Joshi, Param Singh and O.S. Shukla</td>
<td>84–94</td>
</tr>
<tr>
<td>8.</td>
<td>B.C. Melt Refining &amp; its Benefits in D.S. Process - by Sanjay Awasthi and Rajesh Srivastava</td>
<td>95–104</td>
</tr>
<tr>
<td>10.</td>
<td>Recycle and Reuse of Sugarcane Water in Sugar Manufacturing - by B. Rame Gowda and Dr. S. Arockiasamy</td>
<td>111–120</td>
</tr>
<tr>
<td>11.</td>
<td>Modification in Sparger Type Juice Sulphitor - by M.K. Biswas</td>
<td>121–130</td>
</tr>
<tr>
<td>15.</td>
<td>Water Management in Sugar Factories - by D. Mukherjee and G.K. Shukla</td>
<td>159–170</td>
</tr>
</tbody>
</table>
16. Improving the Efficiency of Carbon/Diatomaceous Earth Filtration in Sugar Refining Using the Carbo-UA Process -
by Benhur Rodolfo Pabon, James H. Bushong and Emmanuel M. Sarir

ENGINEERING SECTION

1. Last Mill GRPF Juice Supplements Maceration -
   by Giri, Srivastava & Malik

2. Bagasse Burning Principle and Care -
   by Dinen K. Ghosh

3. Rope Coupling for Sugar Mill Drives -
   by C.G. Mane & V.M. Murugkar

4. Major Problems for Water Management in Sugar Factory Cogeneration -
   by G.P. Thorushe, B.A. Pokale, P.H. Patil

5. Working of Diffuser in Arunachalam Sugar Mills -
   by K. Patchappalam

6. Bio Fuel Besides Bagasse for Power Generation in Sugar Industry -
   by Dr. R.B. Khandagave and T.L. Raghavan

GENERAL & CO-PRODUCT

   by N. Gunasekaran and Dr. S. Arockiasamy

3. ISO 14001 at Saraswati Sugar Mills - by Sanjay Awasthi, Manoj Gupta and Sunil Tiwari

4. Use of Microbial Sensors in Fermentation Industries - by Santosh Kumar, S. Mohan, P.K. Jain and P.K. Agrawal

5. Improve Sugar Quality and Decrease Sucrose Losses by Cane Washing and Proper Mill Sanitation - by M.K. Biswas
