DELIVERING VALUE

DRIP AS A DELIVERY SYSTEM FOR SUGARCANE
A drip irrigation system is a platform for applying diverse substances that enable fast and effective crop treatment, while significantly lowering farm operation costs.
APPLICATIONS

PEST & DISEASE CONTROL
- Chemical
- Biological

PHYSIOLOGICAL APPLICATIONS
- Ripening
- Mycorrhiza

MILL EFFLUENTS
- Flushing water
- Vinasse

FERTILIZERS

BENEFITS

- Reduced spraying → lower operational costs
- Faster reaction time
- Less dependency on weather (e.g. wind, rain, radiation)

- Easier accessibility to every infield plant – at any time and at any crop development stage
- Lower environmental impact – less aerial drifting, less leaching, less runoff – by placing all substances where needed

WANT TO KNOW MORE ABOUT DRIP AS A DELIVERY SYSTEM?
Contact our experts: WWW.NETAFIM.COM
Look for us at:
PEST & DISEASE CONTROL

Fast and efficient pest management, while eliminating the need for spraying
**PEST & DISEASE CONTROL**

**SIGNIFICANT REDUCTION IN GIANT BORER**

*Location: Seresta Plant, Teotônio Vilela, State of Alagoas, Brazil*
*Years: 2008-2011*

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Live forms/ha</th>
<th>Reduction</th>
<th>Yield Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-01</td>
<td>CONTROL</td>
<td>2,056</td>
<td></td>
</tr>
<tr>
<td>T-02</td>
<td>B. Bassiana 2kg/ha</td>
<td>2,000</td>
<td>-76%</td>
</tr>
<tr>
<td>T-03</td>
<td>B. Bassiana 4kg/ha</td>
<td>500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yield (tons/ha)</th>
<th>T-01 CONTROL</th>
<th>T-02-03 Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83</td>
<td>96</td>
</tr>
</tbody>
</table>

**DESTRUCTION OF MAHANARVA FIMBRIOLATA (CIGARRINHA DA RAIZ), WHILE ELIMINATING NEGATIVE EFFECTS OF SPRAYING**

Drip application of Actara® (Tiametoxam) is as effective against Mahanarva fimbriolata as aerial spray application.

*Location: Mineiros do Tietê, São Paulo, State of São Paulo, Brazil*
*Years: 2009-2010*

**Significant savings in manpower and number of spray applications over the year**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Live forms, 45 days after application</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL</td>
<td></td>
</tr>
<tr>
<td>Spray application</td>
<td></td>
</tr>
<tr>
<td>Actara by drip</td>
<td></td>
</tr>
</tbody>
</table>

**SAVES 15 $/HA**

Significant savings in manpower and number of spray applications over the year.
DRAMATIC DECREASE IN WHITE GRUB (COCHLIOTIS MELOLONTHOIDES) LARVAE

Drip application of Attaken significantly lowered the number of White Grubs compared to application by other irrigation methods.

AVERAGE GRUBS PER SAMPLE

CONTROL
7

DRIP
1.95

HUGE DROP IN NEMATODE INFESTATION

56% DECREASE IN NUMBER OF NEMATODES

6% INCREASE IN PLANT HEIGHT 10% YIELD INCREASE

Number of nematodes (Pratylenchus zeae) in 50g of roots

Location: TPC Sugar Estate, Tanzania
Years: 2012-2013

Plant height 144 days after planting (DAP)

Location: Santa Fé, Nova Europa, State of São Paulo, Brazil
Year: 2014
PHYSIOLOGICAL APPLICATIONS

Precise, fast and cost-effective application of growth stimulants and ripening substances
HUMIC ACID DRIP APPLICATION –
BIGGER ROOTS, BIGGER PLANTS,
AND BIGGER YIELDS

Humic acid treatment impact on sugarcane yield

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Yield (tons/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL</td>
<td>89</td>
</tr>
<tr>
<td>Humic Acid</td>
<td>116 (+23%)</td>
</tr>
</tbody>
</table>

Location: Vale do Sol, State of São Paulo, Brazil
Year: 2009

MYCORRHIZA TREATMENT –
GREATER SUGAR CONTENT
AND YIELDS

Sugar content

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Kg/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL</td>
<td>82</td>
</tr>
<tr>
<td>Mycorrhiza</td>
<td>90</td>
</tr>
</tbody>
</table>

Sugar yield

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL</td>
<td>11,383</td>
</tr>
<tr>
<td>Mycorrhiza</td>
<td>12,751</td>
</tr>
</tbody>
</table>

Location: Salvador, State of Bahia, Brazil
Year: 2011
MILL EFFLUENTS

Environmentally-friendly and cost-efficient method to apply various mill by-products

VINASSE APPLIED VIA DRIP – ENVIRONMENTALLY-FRIENDLY SUGARCANE-GROWING TECHNIQUE

Netafim's vinasse practice enables application of up to 150 m³/ha of vinasse all year round. This creates an equilibrium between the vinasse a field produces and the vinasse it receives in return.

Disclaimer and clarification
The information presented in this review is only informative, and cannot be considered as a recommendation. To inject any substance through a drip system, one must ensure that:
- the substance is registered locally as authorized for use through drip
- the substance and dosage are approved by Netafim
Before each application, it is advised to contact your local Netafim representative for consultation.
GROW MORE CANE