An Effective and Efficient Granular Neem Based Bio-pesticide for Pest Management

S. Balaji & Team
E I D Parry (India) Ltd
R&D Centre, Thyagavalli
Cuddalore, Tamil Nadu, INDIA
E-mail: sbalaji@parry.murugappa.com
• Company profile
• AVANA - An overview
• AVANA - For Crop protection & Production in Paddy
• AVANA - For Crop Protection & Production in Sugarcane
• Conclusion
Established in 1900

29 Businesses

Man power 32000

Group turnover US$ 4 Bn (2013-14)
- Established in 1788
- Established first Sugar plant in India - 1842
- Established first Distillery in India - 1848
- Pioneer in Fertilizers from 1906
- World’s largest manufacturer of Azadirachtin
Product Range from Parry’s Bio

Crop Protection

Crop Production

Enhancer

10/25/2014

226 years of EID Parry
Patent on AVANA

Patent on granular formulation of Neem Seed Extract and its Process

Assignee: E. I. D. Parry (India) Limited

Patented in USA, China, India & South Africa.

Pub. No.: US2006/0099233 A1
AVANA in Paddy
For Protection and Production

- Imparts Phytotonic effect
- Protects against Stem borer
- Protects against Rice Leaf folder
- Protects against Brown Plant Hopper
- Protects against Rice Water weevil

Application video
AVANA for Crop protection in Paddy
Bio-efficacy Trial against Rice Stem Borer and Rice Leaf folder

% Reduction over control @ 28 DAT

- Rice stem borer (Scirpophaga incertulas):
  - AVANA @ 7.5 Kg/ha: 79.22%
  - Chemical control @ Recommended dosage: 86.49%

- Rice leaf folder (Cnaphalocrocis medinalis):
  - AVANA @ 7.5 Kg/ha: 81.51%
  - Chemical control @ Recommended dosage: 90.5%

**Result Highlights**

- AVANA showed effective control of Rice stem borer and Rice leaf folder
AVANA for Crop Production in Paddy
Phytotonic effects- Crop Booster

Trial Location: West Bengal, INDIA

Trial Highlights: AVANA boosted the growth of plants when compared to the chemical competitor
AVANA for Crop Production in Paddy
Phytotonic effects- Yield Enhancer

- Trial Location: West Bengal, INDIA
- AVANA showed a 4.8% increase in yield over chemical control and a 17.9% increase over UTC.

**Result Highlights**

- 226 years of EID Parry
South Korea - AVANA for Crop protection in Paddy

Bio-efficacy trials against Rice water weevil

(Lissorhoptrus oryzophilus Kuschel)

Nursery application, S.Korea

Better control of water weevil

Result Highlights

Product registered in S.Korea
China - AVANA for Crop protection in Paddy

Bio-efficacy trials against Brown Plant Hopper (BPH) and Leaf Folder

- Effective control of BPH and leaf folder.
AVANA in Sugarcane for Protection & Production

- ESB Control
- Phytotoxic effects
- Crop Protection
- Crop Production
AVANA for Crop protection in Sugarcane

Bio-efficacy Trial against Early Shoot Borer (*Chilo infuscatellus*)

**Crop Stage:** Planting
**Total Area:** 92.8 acres
(Average of 36 trials)

**Crop Stage:** Ratoon
**Total Area:** 19.4 acres
(Average of 4 trials)

DAP: Days after Planting; ESB: Early shoot borer
AVANA for Crop production in Sugarcane

Phytotonic effects

Trial Details:
Crop stage: Ratoon
Total Area: 1.55 acres

AVANA 4.0 Kg/Ac

- 8.44: 22.6% increase over control

Untreated Control Plot

- 6.88: 19.2% increase over control

Legend:
- No of Leaves/Tiller
- No of Tillers/plant
AVANA for Crop Production in Sugarcane
Phytotonic effects- Yield Enhancer

Result Highlights
AVANA showed 8.0% increase in yield over chemical control and 13.32% increase over UTC.
Conclusion
Conclusion

- Controls wide range of pest problems in Paddy and Sugarcane along with additional benefit of phytotonic effects.
Conclusion

- Controls wide range of pest problems in Paddy and Sugarcane along with additional benefit of phytotonic effects.

- Effective crop protection for long periods.
Conclusion

- Avana controls wide range of pest problems in Paddy and Sugarcane along with additional benefit of phytotonic effects.

- Effective crop protection for long periods.

- Commercially viable solution for safe and sustainable organic agriculture.
Thank You
for your kind attention !!!