



# "BEST POSTER PRESENTATION AWARD"



Prof. N. R. Chauhan, Assistant Research Scientist, AINP on Pesticide Residues, ICAR, Unit-9, Anand Agricultural University, Anand has been awarded "Second Prize" for Best Poster Presentation on "Dissipation studies of spiromesifen 22.9% SC in/on Bitter gourd (*Momordica charantia*)" under Theme No. 3 Recent Trends in Sustainable Pests and Diseases Management Through Novel Pesticides For Food Nutritional Security of the event in National Symposium on 'Sustainable Management of Pests and Diseases In Augmenting Food and Nutritional Security' organized by Navsari Agricultural University, Navsari in collaboration with Entomological Research Association, MPUAT, Udaipur (Rajasthan), Plant Protection Association of Gujarat (PPAG), Anand and Horticultural Society of Gujarat during January 22-24, 2019 at ASPEE College of Horticulture & Forestry, NAU, Navsari.

**Dissipation studies of spiromesifen 22.9% SC in/on Bitter gourd (*Momordica charantia*)"**  
**Prof. N.R.Chauhan, M.N.Joshi, Dr. N.S.Litoriya, Dr. K.D.Parmar and Dr. R. L. Kalasariya**

**DISSIPATION STUDIES OF SPIROMESIFEN 22.9% SC IN/ON BITTER GOURD (*Momordica charantia*)**  
 N. R. Chauhan, M. N. Joshi, N. S. Litoriya, K.D. Parmar and R.L. Kalasariya AINP on Pesticide Residues, ICAR Unit-9, Anand Agricultural University, Anand-388 110 (Gujarat)

**Objective:** To study the residual status of spiromesifen 22.9% SC in/on bitter gourd.

**Year of study:** 2016-17

**Location:** Anand Agricultural University, Anand (Gujarat)

**Methodology:** From the treated plots used for residual study during rabi 2016, a representative sample of bitter gourd fruits were collected and brought in the laboratory at 0, 1, 3, 5, 7, 10 and 15 days after the second spray. For this purpose, the bitter gourd fruits were picked up randomly from all the three replicators so that the final sample size is about 2 kg as composite sample. The sample of bitter gourds were collected in a clean polythene bag, well labelled and immediately brought in the laboratory for residue analysis by adopting QuEChERS method (Anastassiades et al., 2003) with certain modifications.

Dosage (mg/ml)	Standard Error (S.E.)	Standard Error (S.E.)
0.55	0.15	0.15
1.10	0.15	0.15
1.65	0.15	0.15
2.20	0.15	0.15
2.75	0.15	0.15
3.30	0.15	0.15
3.85	0.15	0.15
4.40	0.15	0.15
4.95	0.15	0.15
5.50	0.15	0.15

**Results:** The bitter gourd were sprayed with spiromesifen 22.9% SC @ 56 and 162 g a.i. ha<sup>-1</sup> twice at 36<sup>th</sup> fruiting stage. The initial deposit (zero day i.e., 2 hour after application) of spiromesifen residue in bitter gourd fruits were 0.55 and 1.75 µg g<sup>-1</sup>, respectively. Further they gradually dissipated upto 0.22 µg g<sup>-1</sup> on 7<sup>th</sup> and 10<sup>th</sup> day in both doses after last application. The average residue of spiromesifen were BDL on 10<sup>th</sup> and 15<sup>th</sup> day after application on bitter gourd. The half-life determined from dissipation pattern was 5.19 and 3.81 days in standard and double dose, respectively.

**Conclusion:** On the basis of results it could be concluded that the initial deposit viz. 0.55 and 1.75 of spiromesifen in/on bitter gourd fruit gradually dissipated to 0.22 µg g<sup>-1</sup>. Spiromesifen was below detection limit (BDL) on 15 days after application on bitter gourd so safe waiting period was consider 15 days.

**References:** Anastassiades M, et al. (2003) Multiresidue method determining 18 pesticides by liquid chromatography coupled with electrospray ionization. *J. Chromatogr. A* 1017: 253-265.

**Presented at "National Symposium on Sustainable Management of Pests and Diseases in Augmenting Food and Nutritional Security" held at ASPEE College of Horticulture & Forestry, Navsari Agricultural University, Navsari on January 22-24, 2019.**

**National Symposium on Sustainable Management of Pests and Diseases in Augmenting Food and Nutritional Security**  
 Navsari Agricultural University, Navsari, Gujarat  
 January 22-24, 2019

Organized by: [Logos of AAU, ICAR, etc.]  
 In Collaboration with: [Logos of various institutions]

**CERTIFICATE**

This is to certify that  
**Sr/Dr./Ms./Mrs. N. R. CHAUHAN AAU Anand**  
 has been awarded for Best Oral/Poster presentation and adjudged **II** on the topic entitled  
Dissipation Studies of Spiromesifen 22.9% SC  
 in  
 National Symposium on Sustainable Management of Pests and Diseases in Augmenting Food and Nutritional Security  
 held at ASPEE College of Horticulture & Forestry, Navsari Agricultural University,  
 Navsari, Gujarat  
 under  
 Thematic area 3: Recent trends in sustainable pests and diseases management through novel pesticides for food and nutritional security

Dr. Sushil Kumar P. Saxena  
 Organizing Secretary

Dr. B.N. Patel  
 Chairman



## “YOUNG SCIENTIST AWARD”



Dr. K. D. Parmar, Assistant Residue Analyst, AINP on Pesticide Residues, ICAR, Unit-9, Anand Agricultural University, Anand has been awarded **“YOUNG SCIENTIST AWARD”** for his meritorious services in **Pesticide Residues** in National Symposium on ‘Sustainable Management of Pests and Diseases In Augmenting Food and Nutritional Security’ organized by Navsari Agricultural University, Navsari in collaboration with Entomological Research Association, MPUAT, Udaipur (Rajasthan), Plant Protection Association of Gujarat (PPAG), Anand and Horticultural Society of Gujarat during January 22-24, 2019 at ASPEE College of Horticulture & Forestry, NAU, Navsari.

