

IRAC-BR

Overview 2016 and Objectives 2017

Thanks the member, board of IRAC-BR,
consultant and IRAC International

Overview 2016

- Communication
 - Participation on Brazilian Entomology Congress
 - Round table
 - MoA leaflet updated
- Regulators
 - Add icon of MoA on the label and leaflet – on going
 - ANDEF is coordinating together with IRAC-BR
 - HRAC, FRAC and IRAC are working together to support ANDEF
- Training
 - Develop a notebook together with SENAR about MoA – on going
 - SENAR reach smaller grower
 - Need to develop the material and train the trainer
 - All member of IRAC-BR were training on MoA and IRM strategies
 - Support all event
 - Entomology and Acarology Symposium of Ceará – prof. Eugenio Oliveira – UFV
 - Corn and Sorghum National Congress – GBIO presentation – Renato Carvalho - Monsanto
 - Pesticides Resistance management Symposium – Renato Carvalho – Monsanto
 - Methodology working group creation

Overview 2016

- Training
 - All member of IRAC-BR were training on MoA and IRM strategies



Overview 2016

- Support all project – on going
 - White fly – *Bemisia tabaci* – 3rd year
 - Lepidoptera
 - *Spodoptera frugiperda* – 20th year
 - *Helicoverpa armigera* – 3rd year
 - *Chrysodeixis includens* – 4th year
 - Stink bug – *Euschistus heros* – 3rd year
 - Spider mite – *Tetranychus urticae* – 17th year

- Gbio
- Refuge effectiveness – 2nd year



GBio – Refuge effectiveness

Field trials – Crop season 2015/16

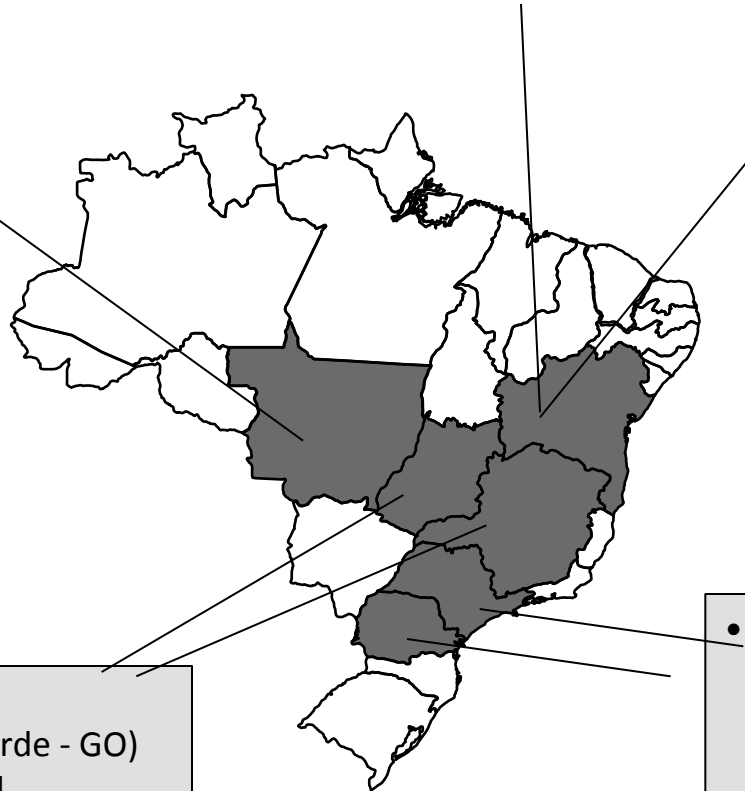
- Corn
 - Mato Grosso – Fundação MT (Lúcia Vivan)
 - Minas Gerais – SGS Gravena
 - Paraná – Fundação ABC (Elderson Ruthes)
- Soybean
 - Mato Grosso – Fundação MT (Lúcia Vivan)
 - Bahia – Herbae (Tiago Salgado)
 - Goiás – SGS Gravena
 - Paraná – Fundação ABC (Elderson Ruthes)
- Cotton
 - Mato Grosso – Fundação MT (Lúcia Vivan)
 - Bahia – Herbae (Tiago Salgado)



Field trials – Crop season 2016/17

- Fundação MT
 - Soybean
 - Harvested
 - Data analysis
 - Cotton
 - Planting – Jan, 10th
 - On going
 - Corn
 - Planting – March, 1st
 - On going

- Herbae (BA)
 - Soybean
 - Harvested
 - Data analysis



- IDE Consultoria (BA)
 - Cotton
 - On going
 - Corn
 - Harvested
 - Data analysis

- UDI
 - Soybean (Rio Verde - GO)
 - Harvested
 - Data analysis
 - Corn (Indianópolis - MG)
 - On going

- Fundação ABC
 - Soybean (Arapoti – PR)
 - Harvested
 - Data analysis
 - Corn (Itaberá – SP)
 - On going

Overview 2016

- Start working with APROSOJA about the BMP – on going
- Other association: ABRAPA and ABRAMILHO – no action completed
- Integration with ABCBio, Agrobio, etc... – on going mainly with Gbio
- Integration with other comitees – HRAC and FRAC
- New Consultant Member – Oderlei Bernardi Phd., Msc.

The graphic features three circular targets with crosshairs. The top target is labeled 'FUNGICIDA' and 'DOENÇAS' and shows a leaf with brown spots. The bottom target is labeled 'INSETICIDA' and 'PRAGAS' and shows a green caterpillar. The left target is labeled 'HERBICIDA' and 'PLANTAS DANINHAS' and shows a green plant. To the right, the text 'CAMPANHA ANTIRRESISTÊNCIA' is written in large, bold, white letters with a distressed texture. Below this, two yellow boxes contain the text 'UTILIZE PRODUTOS COM DIFERENTES MODOS DE AÇÃO' and 'USE DOSES E INTERVALOS RECOMENDADOS'. At the bottom left, a green box contains the text 'CONHEÇA AS ESTRATÉGIAS DE ANTIRRESISTÊNCIA EM APROSOJA.COM.BR/PROTEJA' and 'CONSULTE UM ENGENHEIRO AGRÔNOMO'. At the bottom right, logos for APROSOJA, ANDEF, and Embrapa are displayed, with 'REALIZAÇÃO:' above APROSOJA and 'APOIO:' above ANDEF and Embrapa.

CAMPANHA ANTIRRESISTÊNCIA

UTILIZE PRODUTOS COM DIFERENTES MODOS DE AÇÃO

USE DOSES E INTERVALOS RECOMENDADOS

CONHEÇA AS ESTRATÉGIAS DE ANTIRRESISTÊNCIA EM APROSOJA.COM.BR/PROTEJA
CONSULTE UM ENGENHEIRO AGRÔNOMO

REALIZAÇÃO: **Aprosoja**

APOIO: **ANDEF** **Embrapa**

Overview 2016

Subject	Leader	Action	Update	Timeline
<p><i>Bemisia tabaci</i> monitoring</p>	<p>Luis Antonio Pavan</p>	<p>Field collection on soybean</p>	<p>On going</p>	<p>By May/2017</p>
		<p>Field collection on tomato</p>	<p>On going</p>	<p>By July/2017</p>
		<ul style="list-style-type: none"> • Keep PROMIP methodology • Assesment at 48 hrs • Molecular specie identification 	<ul style="list-style-type: none"> • The methods were compared and based on the results, we decided to keep PROMIP methodology for resistance monitoring. • During season 2015 it was found 2 <i>B. tabaci</i> byotipe Q in tomato (Lins and Sabino). In 2016, all sampled populations were biotype b. • It was observed a higher survivorship for the main products used in soybean and tomato. 	<p>On going</p>

Overview 2016

Subject	Leader	Action	Update	Timeline
<i>Spodoptera frugiperda</i> monitoring	Daniela Okuma	Field sampling of 10 population 1st season	Studies done	Done
		Field sampling of 10 population 2nd season	On going	By July/2017
		Field sampling of 5 population off-season	To be collected	By September/2017
		Data analysis	<ul style="list-style-type: none"> Compared to the season 2016, it was observed a higher survivorship for diamides and IGRs, specially in cerrado region. Prof. Celso Omoto has select a resistant population of <i>S. frugiperda</i> for diamides (cross-resistance) through F2 screen. 	On going

Overview 2016

Subject	Leader	Action	Update	Timeline
<i>Helicoverpa armigera</i> monitoring	Daniela Okuma	Field sampling of 5 population in soybean	Studies done	Done
		Field sampling of 5 population in cotton	On going	By July/2017
		Data analysis	<ul style="list-style-type: none"> Compared to the season 2016, it was observed a higher survivorship for diamides, IGRs, OPs, and SPs, specially in cerrado region. Prof. Celso Omoto has select a resistant population of <i>H. armigera</i> for diamides (cross-resistance) through F2 screen. 	On going

Overview 2016

Subject	Leader	Action	Update	Timeline
<p><i>Chrysodeixis includens</i> monitoring</p>	<p>Cristiane Muller</p>	<p>Field sampling of 10 population in soybean</p>	<p>Field sampling done and monitoring on going</p>	<p>By July/2017</p>
		<p>Data analysis</p>	<ul style="list-style-type: none"> Compared to the season 2016, it was observed a higher survivorship mainly for IGRs, and diamides. Three hot spots – MS, BA and SP. Next season we are going to conduct the monitoring with a resistance management specialist. 	<p>On going</p>

Overview 2016

Subject	Leader	Action	Update	Timeline
<i>Euschistos heros</i> monitoring	Cristiane Stecca	Field sampling of 10 population in soybean	On going (90%)	By April/2017
		Vial-test was validated and adopted for current season	On going	By July/2017
		Collaboration with Embrapa for side-by-side efficacy studies	On going	By April2017
		Data analysis	It was observed a hgher survivorship for some groups (OPs, Neonics, SPs) specially in BA and PR.	On going

Overview 2016

Subject	Leader	Action	Update	Timeline
<i>Tetranychus urticae</i> monitoring	Diogo Togni	Field sampling – at least 15 populations	Most of the support will come from the companies and IRAC institutional funding	By June/2017
		Data analysis	<ul style="list-style-type: none"> Studies of resistance stability showed that Chlofenapyr-resistance has partial stability (>40% survivorship), Etoxazole has high stability and spiromesifen is very instable. 	

Objectives 2017

- Communication
 - Preparation for Brazilian Entomology Congress in 2018
 - Round table and mini-course
 - Regional Workshop for consultants, Coops and Growers
 - Participation on the 1th Pesticide Symposium: Benefits, Impact and Challenges and with HRAC and FRAC.
- Regulators
 - Add icon of MoA on the label and leaflet
 - ANDEF is coordinating together with IRAC-BR
 - HRAC, FRAC and IRAC are working together to support ANDEF
- Support all project – on going
 - White fly – *Bemisia tabaci*
 - Lepidoptera
 - *Spodoptera frugiperda*, *Helicoverpa armigera* and *Chrysodeixis includens*
 - Stink bug – *Euschistus heros*
 - Spider mite – *Tetranychus urticae*
 - Gbio
 - To promote new species monitoring (*Frankliniella* sp. and fruit flies)

Objectives 2017

- Keep working working with APROSOJA about the BMP
- Celebrate 20th anniversary of IRAC-BR
- Support events
 - IV CONBRAF
 - Crop Protection Seminar
 - Support ANDEF about tank mixture proposal
 - Support ANDEF about icon on the label
- Continuous support at ABCBio, Agrobio, etc...

