

IPM Training Courses in Coastal Soybeans



FRASER COAST REGION
QUEENSLAND

Women in Sugar

Bundaberg & Isis

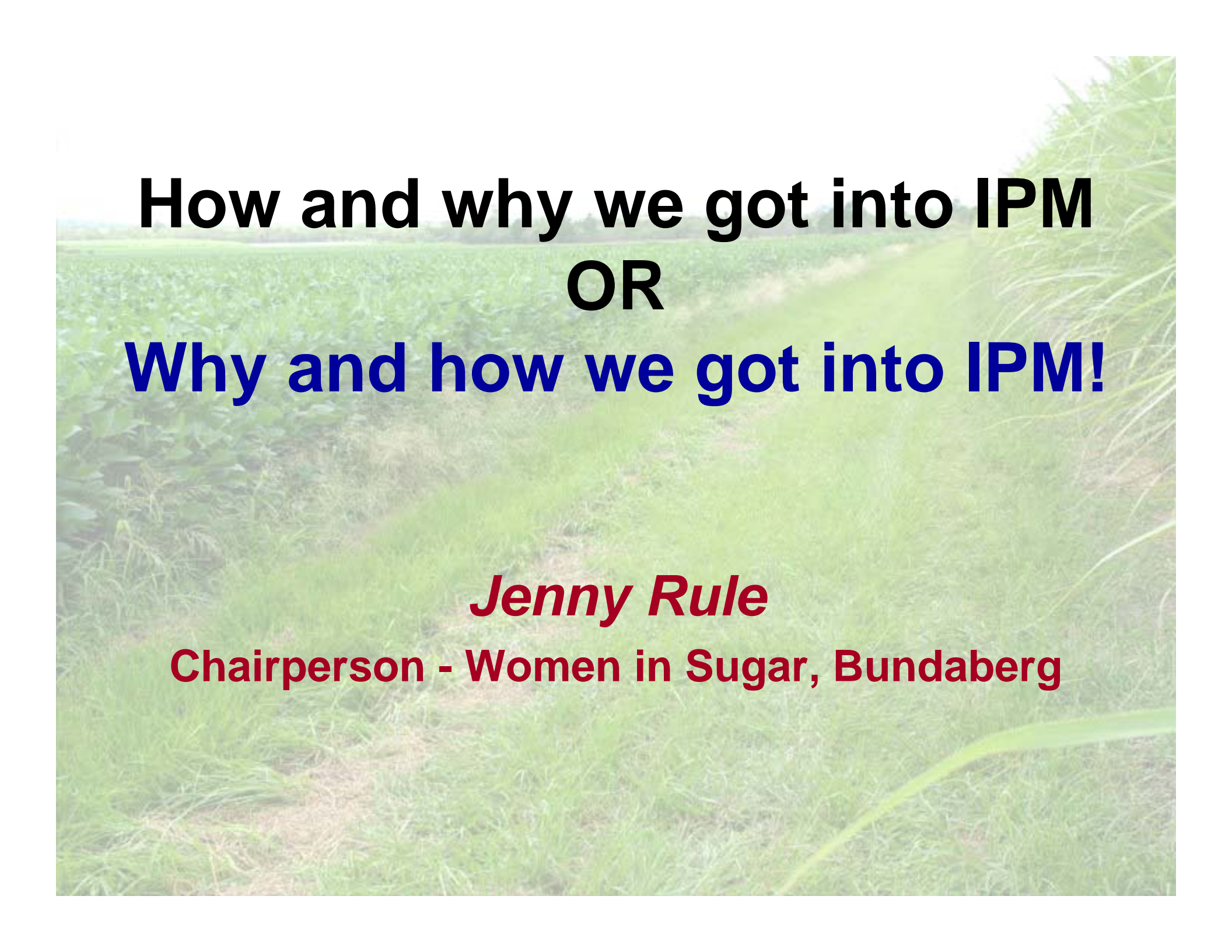
IPM or BPM?

- IPM
- Integrated Pest Management
- Intelligent Pest Management
- Isis Pest Management!
- BPM
- Best Pest Management
- Bundaberg Pest Management!

IPM in Coastal Soybeans



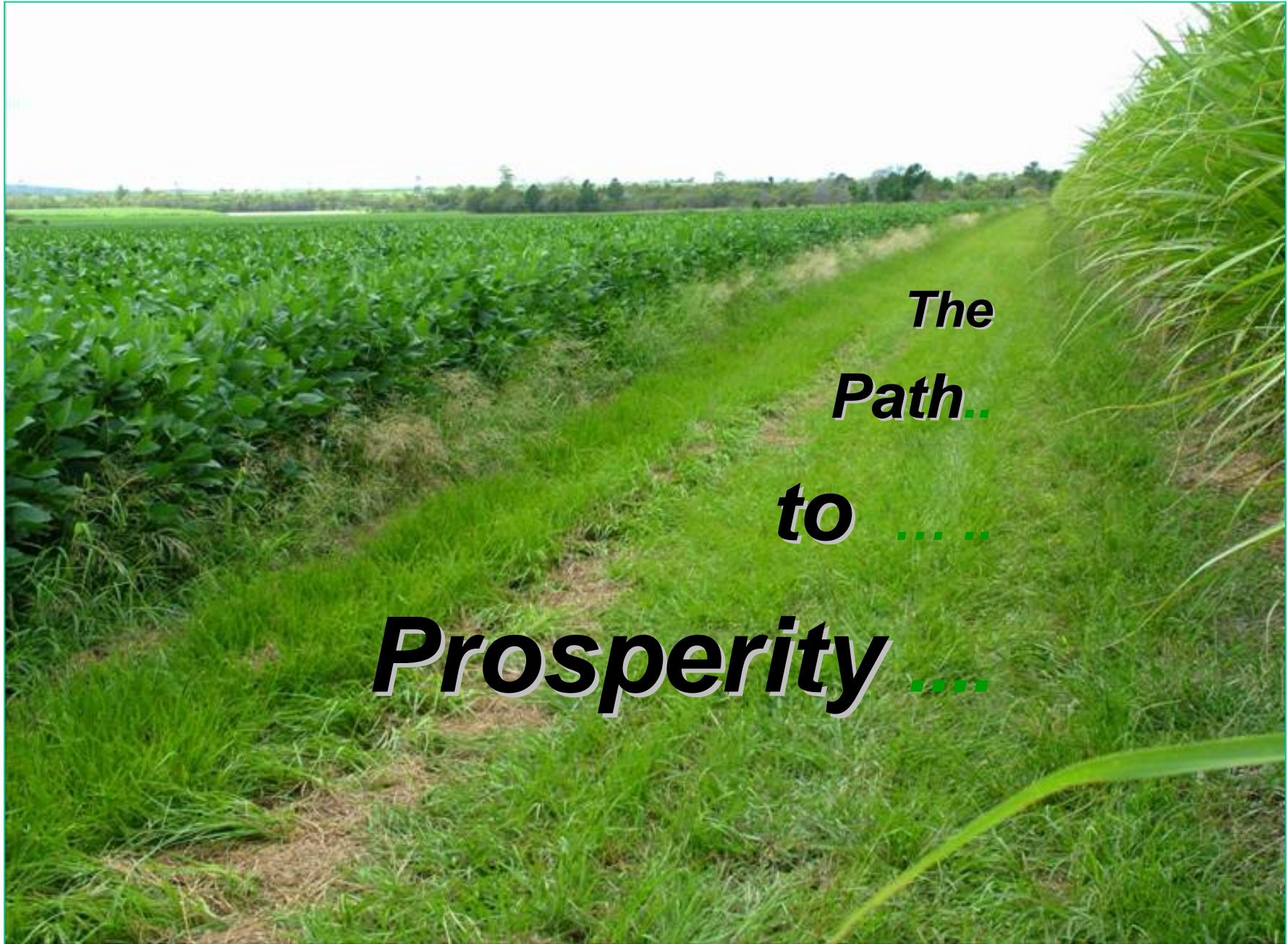
- **How and why we got into IPM - Jenny**
- **The IPM course; our perspectives - Jenny**
- **Putting IPM into practice - Sandra**
- **Future IPM directions - Dianne**
- *4 x 5 = 20 minutes + intro + questions*



How and why we got into IPM
OR
Why and how we got into IPM!

Jenny Rule

Chairperson - Women in Sugar, Bundaberg



*The
Path..*

to

Prosperity

Productivity

- **To improve our productivity of our sugarcane with break-crop soybeans**
- **To maximise the productivity of our soybeans to make it worth our extra work effort.**
- **Long term viability**
- **Economically sound practices**

IPM takes time

**3 green mirid adults,
4 medium brown mirid nymphs,
5 small and 6 large heliothis,
7 vegie bug adults!,
not to mention
200 predatory bugs and
500 damned spiders!**



Labour Shortages

- **IPM is labour intensive**
- **But our partners already working 24/7!**
- **Not enough time for break crops, let alone IPM**
- **An opportunity to realise our potential**
- **We have the time* and motivation**
- *** joke about the time — 1 woman does the sampling of 2 men**

Lack of Knowledge



- **Break crop agronomy**
- **Soybean insects – friend and foe**
- **Pest monitoring**
- **Pest management – when? why? how?**
- **IPM identified as a key factor to bring it all together**

Aims



- **Profitably manage our break crops with a minimum of pesticides**
- **Build the break crop IPM capabilities of 50 industry personnel in the Bundaberg and Isis districts.**
- **50% female participation** (*because the ladies are damnably good bug checkers – old DPI proverb*)

Getting the show on the road



The Bundy IPM Footy Team

How we went about it

- **Strategy adopted:** the hosting of IPM workshops at Bundy & Childers
- **SRDC funding** secured for workshops
- **Funding proposal written by Angella Williams** (position)
- **Technical expertise** from DPI&F & BSES
- **Venues** provided from CaneGrowers
- **Pre-workshop planning** to determine format and content.

A group of people, mostly women, are gathered in a field of green plants. Some are wearing hats and holding materials, possibly related to an educational or agricultural activity. The scene is outdoors and appears to be a practical session from a course.

The IPM Course

A Participant's Perspective

I'm over here!

Jenny Rule

Chairman - Women in Sugar, Bundaberg



There's a bug down there, and a grub as well, there are insects to count, and stories to tell, come along, sing our song, its go soft, its go soft, its go soft time

The IPM Course - **FORMAT**

- **1-day theory workshop**
- **Followed by two ½-day in-field practical demonstrations**
- The first immediately after the theory, the 2nd one month later.
- **Focus on soybeans**
- But reference to other pulse break crops, horticulture and cane grubs

Theory



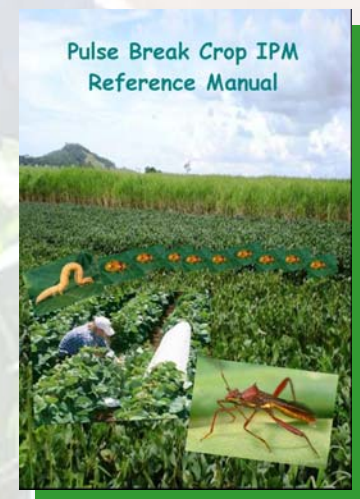
In the Field – Practical Demos

Too much
sampling, I'm
buggered!



The IPM Course - **CONTENT**

- Basic soybean agronomy
- **Common pests in coastal break crops**
- Predators and parasites of pests in coastal break crops
- **Insect identification and biology**
- **Monitoring**
- **Pest thresholds**
- **Pesticide options**
- **Reference Manual**



Pulse
Ref

Pulse B
Refer

Pulse Br
Refer

Pulse Break Crop IPM
Reference Manual



Not forgetting Cane Grubs!



The IPM Course - Impressions

- The theory component was quite intense!!
- A huge amount of information presented to a group with varying prior knowledge.
- Extremely informative but heavy to absorb
- Tempered by the light-hearted presenters! (Austin, Andrew & Hugh - the bug busters!)
- The practical component was extremely beneficial.
- It allowed us to put theory into practice. Everything 'fell into place' so to speak.

Ummm, this is a tad tricky!



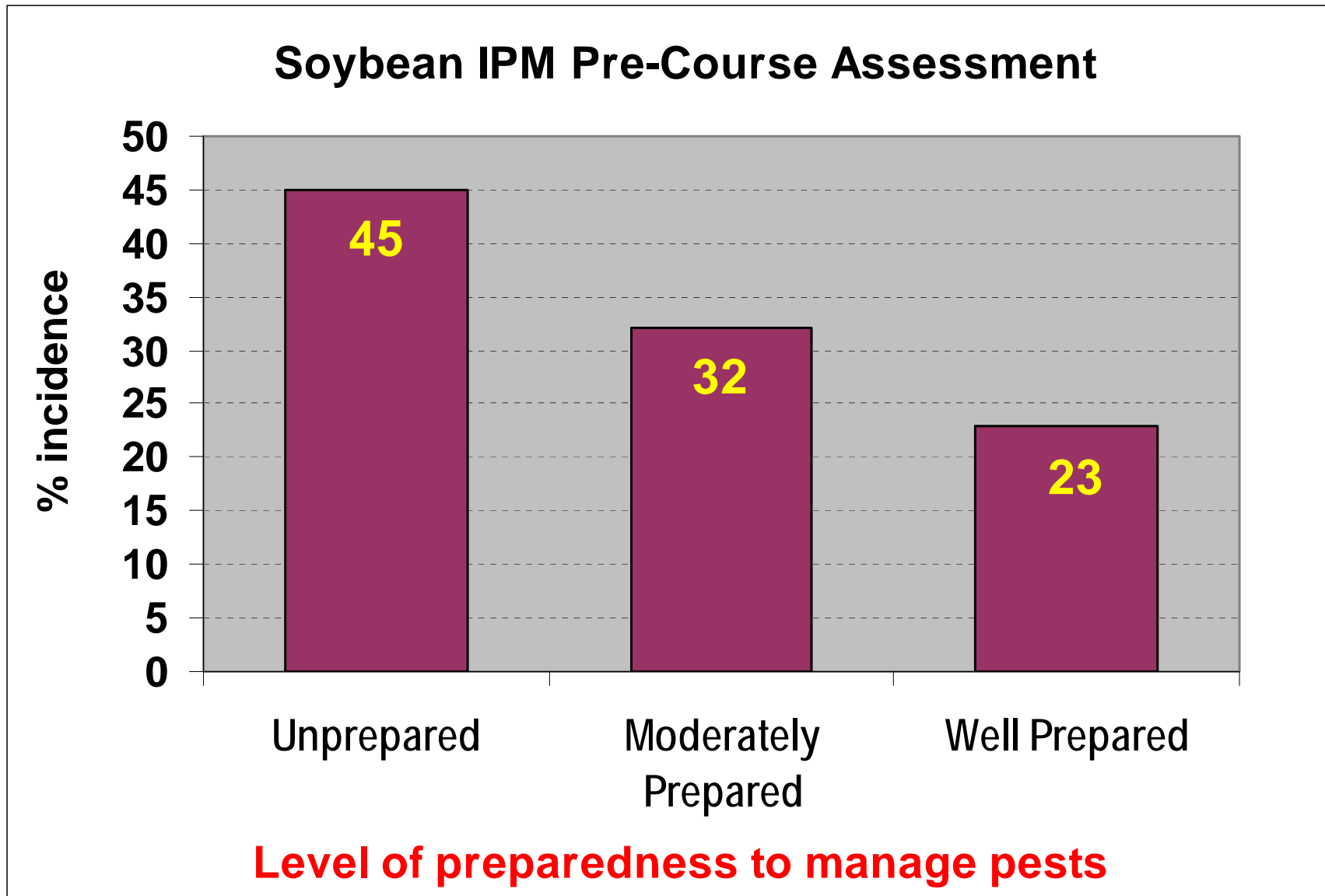
Ahhh, thank you Austin, it is much clearer now!



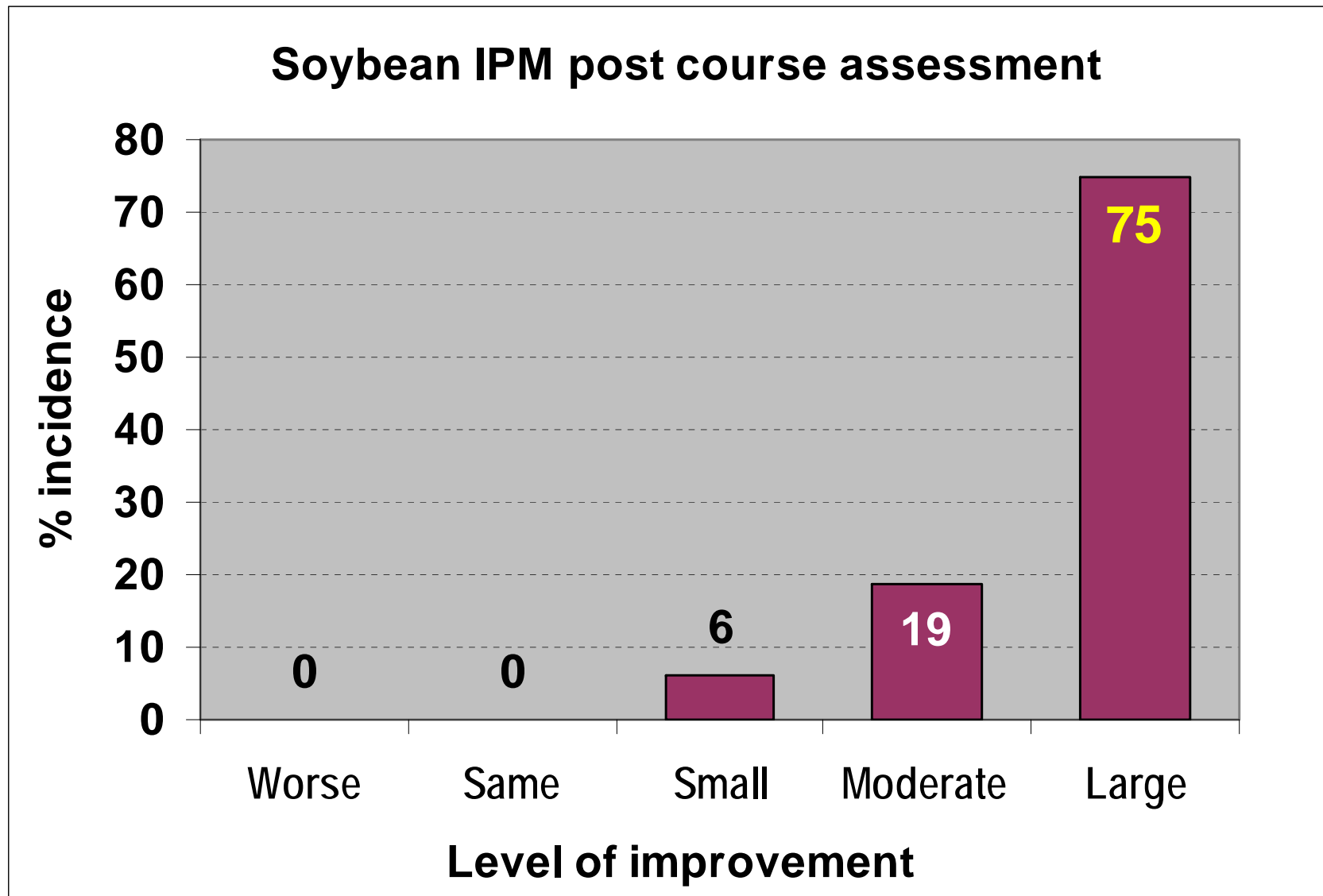
The IPM Course – What we found useful

- **Soybean stages & susceptibility to pests**
- **Pest identification**
- **Huge difference in appearance between young insect stages and adults**
- **Similarity between some pests and predators, especially the bugs**
- **Use of thresholds to reduce pesticide use/costs**
- **Pesticide options and impacts on beneficials**

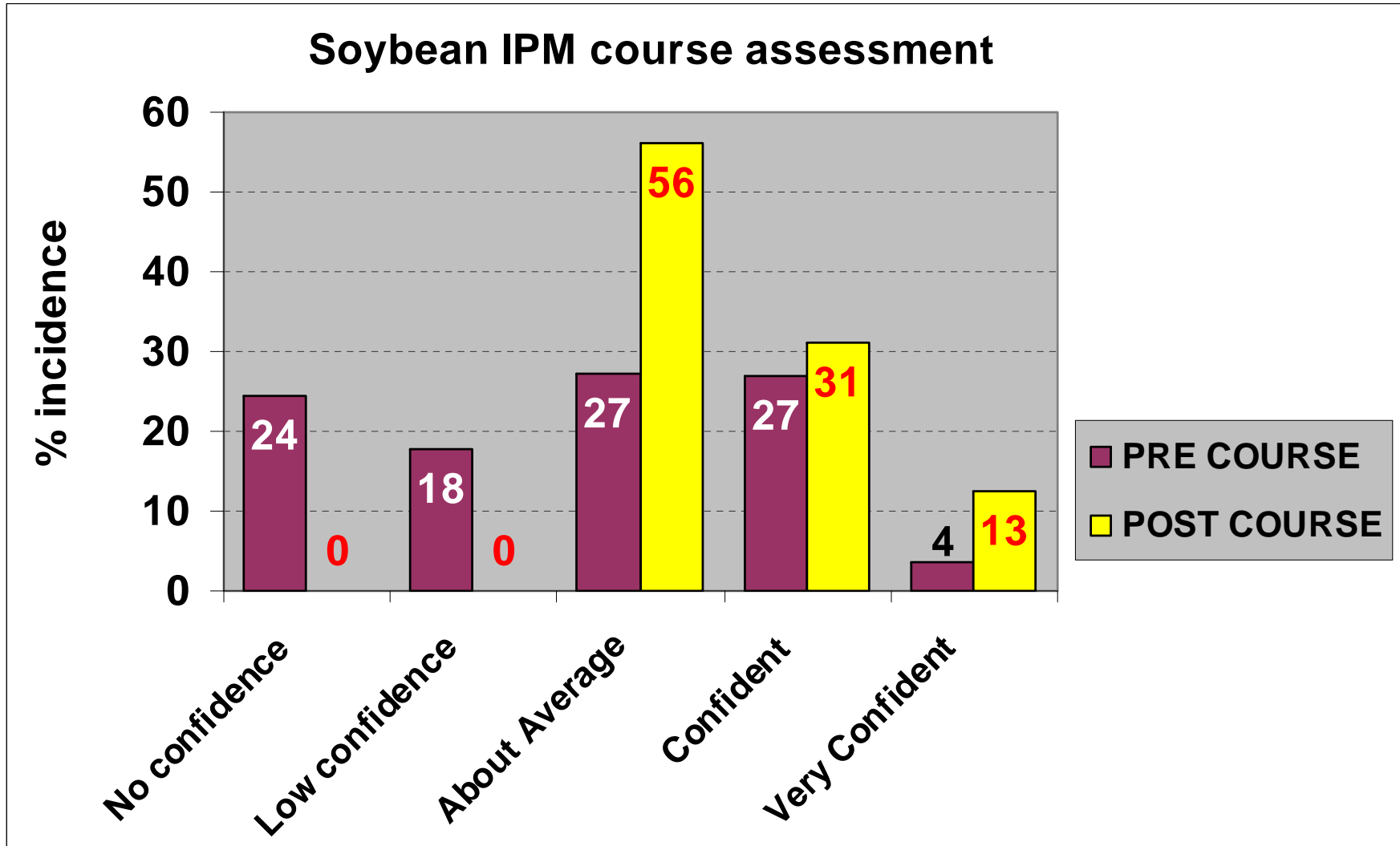
IPM Course Assessments



94% felt they had improved markedly

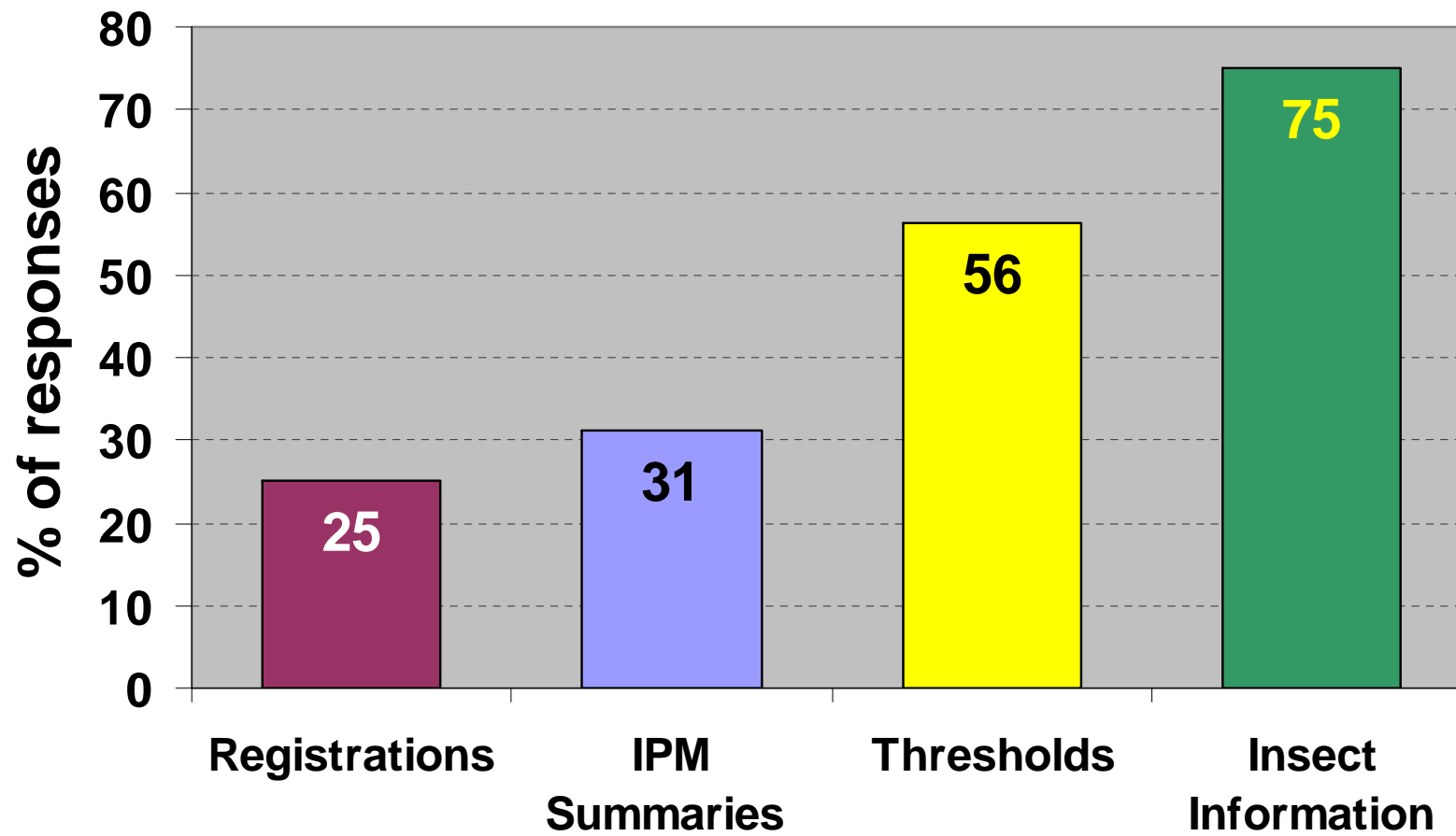


Greatly improved confidence but follow up needed.

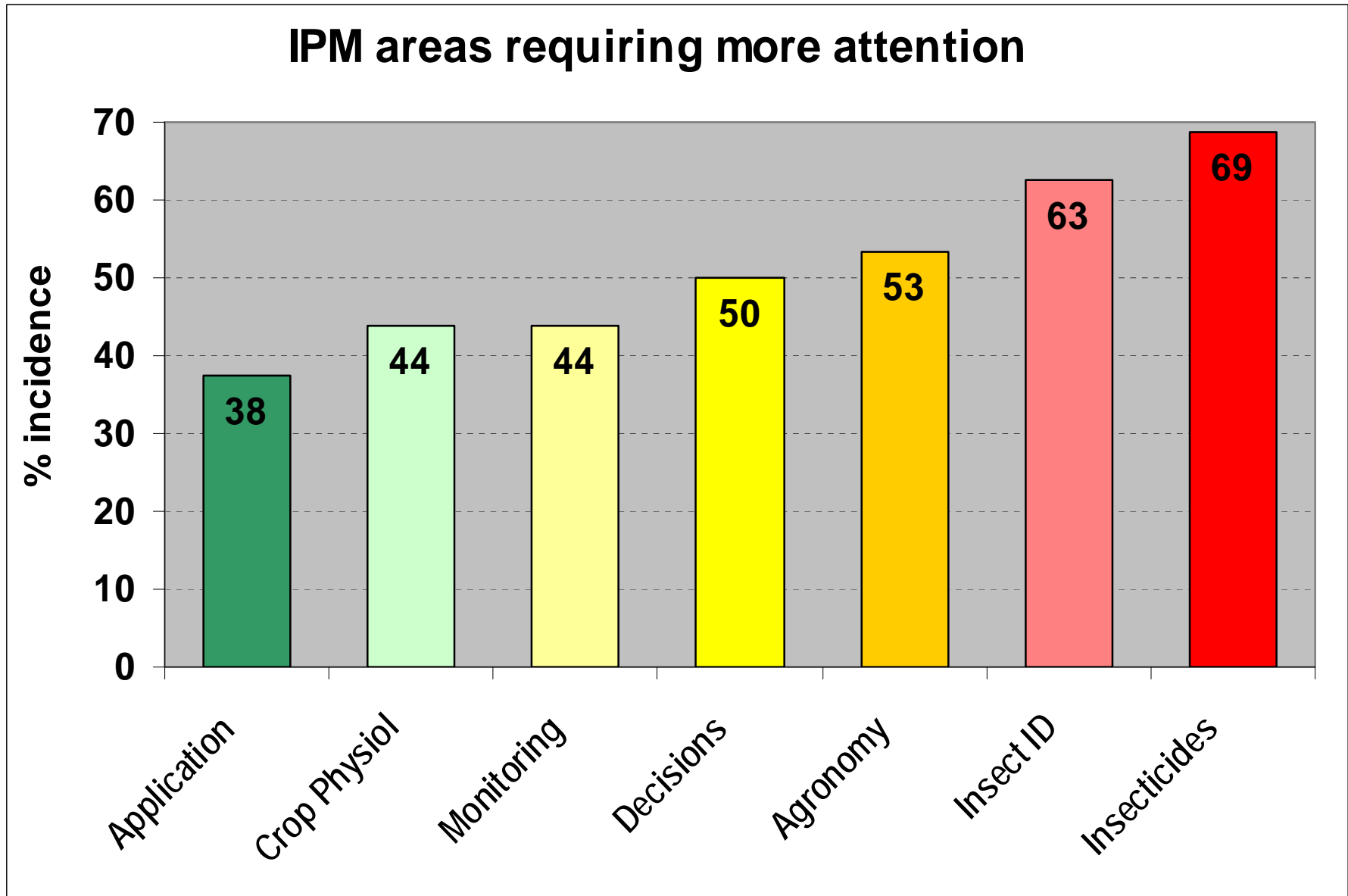


Most referenced: Pest ID, biology and thresholds

Most referenced sections in IPM manual



More attention – Pesticides, Identification, Agronomy



Putting IPM into Practice?

Best ask
Women in
Sugar



Putting IPM into Practice

Forget the bugs, there's a taipan!

Sandra Webb



Putting IPM into Practice



- **Increased involvement** in farm management
- **Transfer** of our knowledge to other crops
- **Regional recognition** of our recently acquired skills
- **Building** of regional IPM networks
- **Heightened awareness** of pests
- **More intelligent pest management**

Increased Involvement and Recognition

- Women are becoming much more actively involved in all farming enterprises aspects.
- We are scouting neighbor's crops, as well as our own, to keep in practice.
- We have been approached to be commercial scout crops.
- We are transferring our IPM skills to other break crops.
- We took an active role in the recent smut outbreak response.

Heightened Pest Awareness



- We know how to monitor and identify the major pests
- We are more aware of pest movement between different crops.
- We can differentiate between cosmetic and serious damage
- We now have guidelines as to when to spray, rather than just spraying blindly

Legume webspinner moth, larva, frass and damage
*Mostly a minor pest causing **cosmetic** damage*



Future IPM Directions



Dianne Bush

IPM Future Directions & Conclusions

Dianne – Women in Sugar Bundaberg

- **The BIG picture** - community expectations
- We are accountable for our own, our neighbour's and our regional environments
- Lifestyle issues on the coast
- The need to embrace change and to improve our skills.

Future Directions & Conclusions

Measures of course's success include:

- **Greatly improved soybean seed quality.**
- **The majority (70%) of crops reached edible quality in 2006.**
- **Transfer of IPM skills** to other grain, horticulture, fibre and tree crops.
- **Establishment of scouting groups** to promote best management practice in Isis.
- **Improved confidence** in all aspects of farm management and in pest management in particular.

Future Directions & Conclusions

A group of people, including several wearing wide-brimmed hats, are gathered in a field of green plants. They appear to be engaged in a field study or educational activity, with some individuals looking at documents or plants. The background shows a vast field of similar plants under a bright sky.

We need:

- **Ongoing IPM capacity for future generations**
- **To help maintain the viability of our cropping systems**
- **More IPM courses**
- **Soft but effective options for bugs**

Future Directions & Conclusions

- So look out for women in the field beating their beat sheets and with magnifying glasses ever ready at hand.
- Look out for women (and men) with the confidence to make spray decisions, and where appropriate, to leave well alone and let the predators do their thing.
- **Happy IPM'ing**
- **BUGS RULE! OK!!**

Acknowledgements

- **Angela Williams** (Sugar Executive Officer, WBBACC) for preparing funding proposals and workshop planning
- **SRDC** for Workshop funding
- **Cane Growers** at Bundaberg and Isis for providing venues, insurance cover
- **Hugh Brier, Austin McLennan, Andrew Dougall** and **Iain Kay** (DPI&F), and **Keith Chandler** (BSES) for writing and presenting the IPM course material
- **Judy Plath** (CANEGROWERS Isis) and **Matt Leighton** (CANE GROWERS Bundaberg) for assistance at the IPM workshops and for post-course IPM support
- **Geoff and Maureen McCarthy** for their local IPM publication initiatives.