

## Pesticide losses

- Most beekeepers will have had pesticide losses
- Especially if you do commercial pollination
- · From misuse, drift, accidents and 'nasties'
- Getting worse (?)





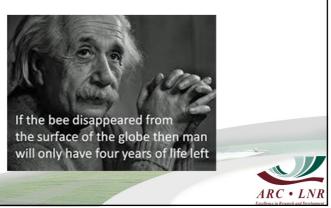






### Food security concerns

- Fears that there will not be enough pollinators (primarily managed honey bees) to pollinate commercial crop plants
- And that it will have a dramatic impact on agricultural sustainability, food security and human survival
- · Einstein's "quote"





# More Regulations

- Changes to regulations, including the banning of some pesticides
- More enforcement
- · The 'stick'
- Some question about how 'safe' you can make industrial-scale agriculture





# Pollinator-friendly Farming

- · The 'carrot' approach
- Using retailer and consumer pressure to change farming behaviour
- Especially attractive in countries where regulations are more guidelines than rules
- · Used as marketing







marketing

#### Lots of Schemes

- Many such schemes over the past 10 years
- · Lots of traction
- Maybe the biggest is Waitrose with a '7 point plan to protect pollinators'











# Bee-Friendly Scheme in RSA Presently developing a Bee-Friendly Certification scheme in South Africa Motivated by continuing losses on some crops, and by limited regulatory response and capacity With a major retail group Hoped to be able to give you the final scheme, but corporates move at their own pace – so still work in progress

#### **RSA Scheme**

- Based on three existing & successful programmes
- Two schemes that have good market penetration
- SASSI (South African Sustainable Seafood Initiative)
- Badger-Friendly Honey
- And the successful IPW (Integrated Production of Wine) auditing system







#### Considerations

- · Company or Country (RSA)?
- Internal audit (company) or independent audit?
- Self-audit (reporting) or inspection-based?
- · Honey bees only or all pollinators?
- Primary products only (say fruit) or everything that has some insect pollination component?
- · How will it work? Colour scheme? Logo's?



#### Considerations – What to audit?

- · Pesticide load, but how?
- Crop based (so score best available options for that crop)
- Part of an IPM programme
- General stewardship practices (no misuse, no off-label use, only genuine products, avoid drift, manage seed dust)





#### Considerations - What to audit?

- Bee forage provision on the farm
- Forage credits (on other land)
- Green infrastructure (verges, margins, inter-cropping)
- Diversified crops (non monoculture)
- Beekeeping practices (codes of conduct for beekeepers with respect to management of ants, diseases, badgers)
- · Indigenous forage / biodiversity



#### Considerations - What to audit?

- · Pollution?
- Land-use practices such as water management, waste management and fire management?
- Alien plant control?
- GM crops?
- BEE (Black Economic Empowerment) ?





# "Bee Miles" loyalty programme

- Products have values / credits based on their bee component (e.g. apple > nougat)
- And the bee-friendliness of that bee component
- That will reward bee-friendly farming sufficiently to warrant changes in pesticide usage









# Thanks

- To the organizers for the invitation
- Nanike Esterhuizen for the bee miles logo

