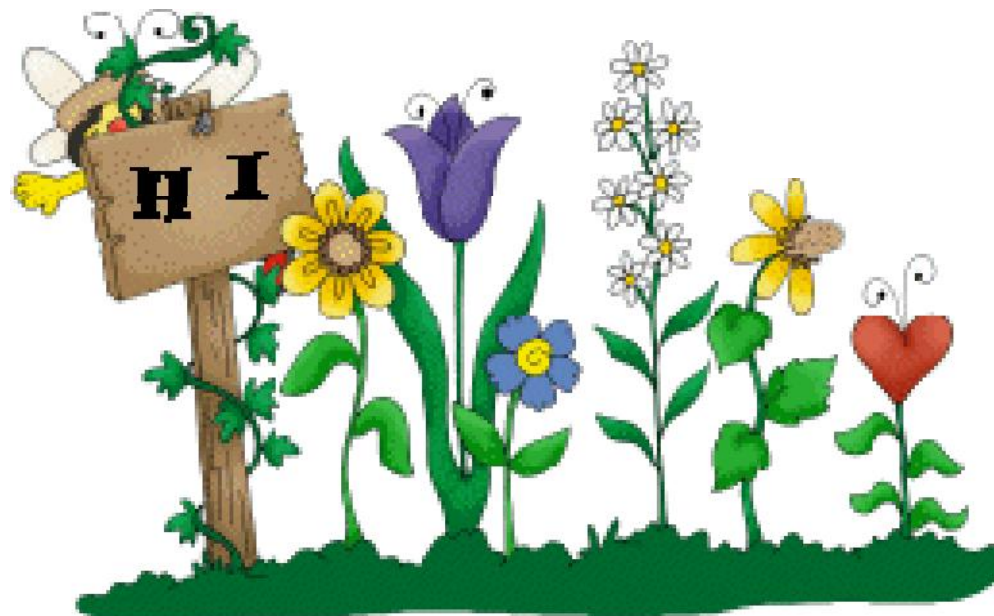




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# Review Of Apiculture Research In Zimbabwe: 1952 To Date



By Milton T. Makumbe

Min. of Agric., Mech. & Irri. Development, Department of Research & Specialist Services, Henderson Research Institute

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# Presentation Overview



- **Introduction**
- **Research from the 1950s to 2000 (that had a huge impact on agriculture and apiculture in Zimbabwe)**
- **Major Research Work from 2001 to date**
- **Major Developments affecting Apiculture Research**
- **Research contribution to the development of the apiculture sector**
- **Implications of apiculture research for stakeholders**
- **Proposed way forward with research**





# Introduction

- **Current Apiculture Research; Government institutions, Private Sector and individual apiculturalists**
- **Research initiated in 1950s**
  - Henderson Research Institute Bee Centre
- **Research work largely spearheaded by a Research Officer attached to the then Ministry of Agriculture, Lands and Rural Development**



# Research from the 1950s to 2000

(that had a huge impact on agriculture and apiculture in Zimbabwe)



- **Bee Queen breeding**



- **Identifying number of bee hives required for adequate crop pollination in fields for several crops or plant species**
  - citrus, peaches, granadillas and leguminous crops e.g. beans
  - six (6) bee hives per hectare for successful and efficient crop or plant pollination





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# Research from the 1950s to 2000

(that had a huge impact on agriculture and apiculture in Zimbabwe) cont.



- **Evaluating bee hives suitability for the Zimbabwean environment**
  - Basket, Kenya Top Bar, Tanzania Top Bar, and Botswana Stick (used by the San Indigenous people).
  - Basket hives, usually dung coated in most of the country's rural areas, were a success and largely promoted for use
  - Botswana Stick Hives were suitable for use in Zimbabwe in cases where individuals were short of 'bought-in' resources
- **In 1995, bee hives set up for evaluating the effects of bee-cropping interactions at Harare Research Station**

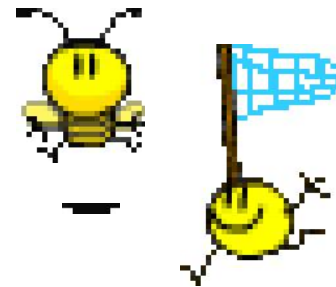


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# Major Research Work from 2001 to date



- **Research largely driven by the private sector, with tertiary education institutions e.g. universities such as Bindura University of Science Education**
- **Cape Bee (RSA spp.) migration and spread of Melanosis (bacterial disease) research**
  - According to research and surveys, African Bees (Zimbabwe spp.) were resistant to Melanosis
  - largely attributed to African Bees' diversified and out-bred gene pool





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## Major Research Work from 2001 to date cont.



- **Five (5) year research programme initiated in Marondera (Mitchell and Mitchell) where six hundred (600) bees inhabiting ten (10) hives were sampled every week for *Varroa*.**
- **Research findings indicated that Zimbabwean bees were tolerating the mite**
- **Thus there was potential for increased resistance against the mite and its effects on the local bees in future**



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## Major Research Work from 2001 to date cont.



- **Racial Status of Zimbabwe's bees (spp. *Apis mellifera scutellata*), 2005.**
- **Research sparked by the migration of *Apis mellifera litorea* from Mozambique that migrates into the Chimanimani area, makes honey and goes back within 4 months every year.**
- **Identification process for the different bees and their hybrids involved identifying bee species based on their ovarian tubes.**





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# Major Research Work from 2001 to date cont.



- **Aspects of hybridization between the spp. found particularly in the periphery of the country and towards the Mozambican borders.**
- **Currently, work is being conducted and perfected within the private sector on ways to collect *Propolis*.**





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# Major Developments affecting Apiculture Research



- Height of the liberation war (1978), the sole Apiculture Research Officer in Zimbabwe left
- Staff that was working with him were transferred to other institutes
- Research work at station was crippled
- Post 1978, the bulk of the research driven from a rented portion (the bottom part) of ART Farm in Harare.



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# Major Developments affecting Apiculture Research cont.



- **Work conducted at ART Farm encompassed Apiculture research, training and production, with sponsorship from New Zealand Aid and USAID**
- **Residential Training Center for twelve (12) people set up at the farm**
- **209 hives were set up at ART Farm in Harare for conducting basic research.**



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# Research Contribution to the Development of the Apiculture Sector



- **Apiculture research information was a key driver in promoting apiculture, and has been the driver in capacitating apiculture farmers**
- **Thorough research, there has been a mushrooming of numerous farmer co-operatives/ groups**



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# Implications of Apiculture Research for Stakeholders



- **Apiculture research was responsible for the commercialization of beekeeping**
- **Significantly improvement in honey (and crop) production output through imploring technologies generated locally through research.**





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# Proposed way forward with research in Zimbabwe



- **Need to channel resources (funding) towards apiculture from government**
- **Need to lobby for resources through collaborative research with international organizations that are highly involved in apiculture.**
- **Need for improved co-ordination between the various sectors (mainly Government and Private Stakeholders) in Zimbabwe**
- **Need to train apiculture researchers**



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