

Milk SA Research Programme

up and running

**by Milk SA Programme Manager R & D: Dr Heinz Meissner.**

A number of research projects identified by dairy farmers and others as being of prime importance has been initiated in 2014/2015 and has picked up *momentum* since. These are:

1. **Liver fluke** using two approaches, one being a survey on four farms in the Tsitsikamma area to establish the extend of infestation, the circumstances under which liver fluke occurs and the impact it has on cow health and milk production. The title of the project managed by Dr Jan van Wyk of UP, Onderstepoort is: “*Fasciola hepatica*: Impact on dairy production and sustainable management on selected farms in South Africa”. The second approach, resulting from the perception that the efficacy of drugs on the market is severely influenced by increasing resistance of the parasites, is to investigate alternative control methods such as bio-control. The title of the project managed by Prof Mark Laing of UKZN is: “Integrated control of Fasciolosis of livestock”.
2. **Mastitis**, again using two approaches: one being an investigation of the way farmers aim to prevent and manage the condition and a survey of the causing organisms, some of which may be resistant to generally used antibiotics. The title of the project managed by Dr Martin van der Leek of UP, Onderstepoort is: “Resistance to available antibiotics in lactating cows with mastitis”. In the second approach, which is linked to the Onderstepoort project, natural lethal enemies of the causing organisms are isolated. The title of the project also managed by Prof Mark Laing of UKZN is: “Investigating alternative methods such as bacteriophages and bacteriocins to control mastitis organisms”.
3. **Microbial contamination of milk**, which resulted from a concern that potentially dangerous organisms could enter the milk-to-consumer line. The project which was initiated in association with the DSA, is in its final stages and managed by Prof Elna Buys of UP. The title is: “Characterization of coliform bacteria and *Escherichia coli* from fresh milk to determine the prevalence of possible pathogenic types”.
4. **Disease monitoring**, which resulted from the need to implement an early warning system of disease occurrence and movement through farming areas in order to facilitate preventative measures and timely treatment. The project is managed by Dr Danie Odendaal of V-Net, the title being: “National disease monitoring and extension system for the Dairy Industry”.

Research programmes which commenced in 2016 include projects on **milk flocculation**, projects addressing the problem of **biofilm formation in milk lines** and projects on **genetic and performance monitoring**. These and interesting findings resulting from the research will be highlighted in future bulletins!

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