



RESISTANCE TO AVAILABLE ANTIBIOTICS IN LACTATING COWS WITH MASTITIS

(PRJ-0061-2015)

University of Pretoria -

Quarter 3 2015 (July 2015 till September 2015)

Project goals

Goal 1 - Appoint graduate students: MSc student from the University of Pretoria & Master student/s from the veterinary degree program at Universiteit Utrecht (First quarter)

Achievements

MSc (BSc Agric Hon) (Pretoria) - Nicolene Schlimmer (Mastitis Survey - Epidemiology)
MS (Business Economics) (Wageningen) - Leen Leenaerts (Mastitis Survey - Economics). Note: the mini research project veterinary student/s (Utrecht) were replaced by this full-time student from Wageningen.
MSc (Vet Epi) (Pretoria) – Alf Lategan BVSc (SCC Fluctuation)
MSc (Vet Epi) (Pretoria) – Louis Hoek BVSc (E Cape SCC Anomaly)

Non-achievements / underperformance

Project started a quarter late.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Goal 2 - Passive testing of mastitis milk samples: Start the passive testing of all mastitic milk samples submitted to the milk laboratory at the Faculty of Veterinary Science for bacterial isolation & antimicrobial sensitivity. (First quarter)

Achievements

108 samples (cows) from 12 farms have been tested in the Onderstepoort Milk Lab. Mastitic milk samples are being tested at the cow level & consequently there could be antimicrobial sensitivities for the same organism from different cows in the same herd allowing the detection of intraherd differences in antimicrobial sensitivity.

Non-achievements / underperformance

Project started a quarter late. Testing was started late.

Reasons for non-achievements / underperformance

Milk Lab personnel issues & a lab manager that is on sabbatical.

Planned remedies for non-

achievements / underperformance

Other than the Milk Lab manager that remains on sabbatical testing for the project is now a routine.

Goal 3 - Active collection of mastitis milk samples: Plan the logistics for the submission of mastitis milk samples from dairies across South Africa (with assistance of veterinarian advisors). (First quarter)

Achievements

With the issues in the Milk Lab the focus has been shifted for the moment to the collection of milk culture & antimicrobial sensitivity data from the other labs currently analyzing milk samples to include Deltamune, Allerton, VetDiagnostix & KZN. Conversation initiated with Allerton & KZN. The passive collection of data & its analysis is likely to become another MSc project.

Non-achievements / underperformance

Project started a quarter late. Temporary shift from active sample collection to passive data collection.

Reasons for non-achievements / underperformance

Milk Lab personnel issues & a lab manager that is on sabbatical.

Planned remedies for non-achievements / underperformance

Focus will shift to passive data collection following the completion of the mastitis survey design.

Goal 4 - Preparation of research protocols: MSc student (Pretoria) – Seasonal variation of SCC & Master (Utrecht) – Preparation of survey to elucidate current mastitis treatment & prevention. (The MSc program includes a fair amount of coursework with the amount & schedule unknown to me at this time that may impact the timeline of this project.) (First quarter)

Achievements

MSc (BSc Agric Hon) (Pretoria) - Nicolene Schlimmer (Mastitis Survey - Epidemiology): To follow after completion of survey design.
MS (Business Economics) (Wageningen) - Leen Leenaerts (Mastitis Survey - Economics): Completed.
MSc (Vet Epi) (Pretoria) – Alf Lategan BVSc (SCC Fluctuation): 1st draft completed.
MSc (Vet Epi) (Pretoria) – Louis Hoek BVSc (E Cape SCC Anomaly): 1st draft completed.

Non-achievements / underperformance

Project started a quarter late. Lategan & Hoek proposals timed with their VRM course.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Goal 5 - Passive & active testing of mastitis milk samples: Continue passive testing & initiate the shipping & testing of mastitis milk samples from dairies across South Africa. (Second quarter)

Achievements

See comment under Goals 2 & 3. Finalizing an agreement between UP & KZN regarding the sharing of mastitis organisms/genetic material for bacteriophage work at the behest of Inge-Marie Petzer.

Non-achievements / underperformance

Project started a quarter late.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Goal 6 - Complete & present research protocols: MSc student (Pretoria) – Seasonal variation of SCC Master (Utrecht) – Preparation of survey to elucidate current mastitis treatment & prevention. (Second quarter)

Achievements

See Comments under Goal 4.

No Non-achievements / underperformance has been reported

Goal 7 - Start collection of data for the SCC project (SCC with the co-operation of Logix, weather & geographical data).

Achievements

An agreement was reached with Logix for them to share their milk testing data of the last 10 years. This is a huge database & has presented challenges finding the right format for analysis but this issue is being resolved. Weather data is being provided by Weather SA.

Non-achievements / underperformance

Project started a quarter late.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Goal 8 - Passive & active testing of mastitis milk samples: Continue passive & active testing of mastitis milk samples. (Third quarter)

Achievements

See comment under Goals 2 & 3.

No Non-achievements / underperformance has been reported

Goal 9 - Continue the collection of data for the SCC project. (Third quarter)

Achievements

See comment under Goal 7.

No Non-achievements / underperformance has been reported

Goal 10 - Submit mastitis survey to MPO membership & follow-up on survey participation. (Third quarter)

Achievements

The design of the survey has been a team effort involving Leen Lennaerts/Henk Hogeveen (supervisor), Wageningen & Nicolene Schlimmer/Martin van der Leek (supervisor), Pretoria. The survey will be completed by the end of October, submitted for review by interested parties in November & to the MPO membership in December. A single goal does not accurately reflect the complexity of this task nor the time commitment. Resources have been focussed here to allow for timely completion.

Non-achievements / underperformance

Project started a quarter late.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Goal 11 - Passive & active testing of mastitis milk samples: Continue passive & active testing of mastitis milk samples. (Fourth quarter)

Achievements

See comments under Goals 2 & 3.

No Non-achievements / underperformance has been reported

Goal 12 - Initiate analysis of SCC fluctuation data. (Fourth quarter)

Achievements

On target to analyze in 4th quarter.

No Non-achievements / underperformance has been reported

Goal 13 - Initiate analysis of mastitis survey data. (Fourth quarter)

Achievements

Will shift to the 1st quarter of 2016.

Non-achievements / underperformance

Project started a quarter late.

Reasons for non-achievements / underperformance

Delay in finalizing contract & funding.

Income and expenditure statement

Income and expenditure statement	A0Y232 - Milk SA Financial Report - 30Sep2015_1.pdf
Unnecessary spending during period	No

Popular Report

No file has been uploaded

Additional documentation

[Response to Milk SA letter of 13 October.docx](#)
[Louis Hoek concept proposal Milk SA 2016.docx](#)
[milk sa update 261015.docx](#)
[milk sa update 170815.docx](#)
[milk sa offline 4th quarter.docx](#)

Statement

Levy funds were applied only for the purposes stated in the contract	Yes
Levy funds were applied in an appropriate and accountable manner	Yes
Sufficient management and internal control systems were in place to adequately control the project and accurately account for the project expenditure	Yes
The information provided in the report is correct	Yes