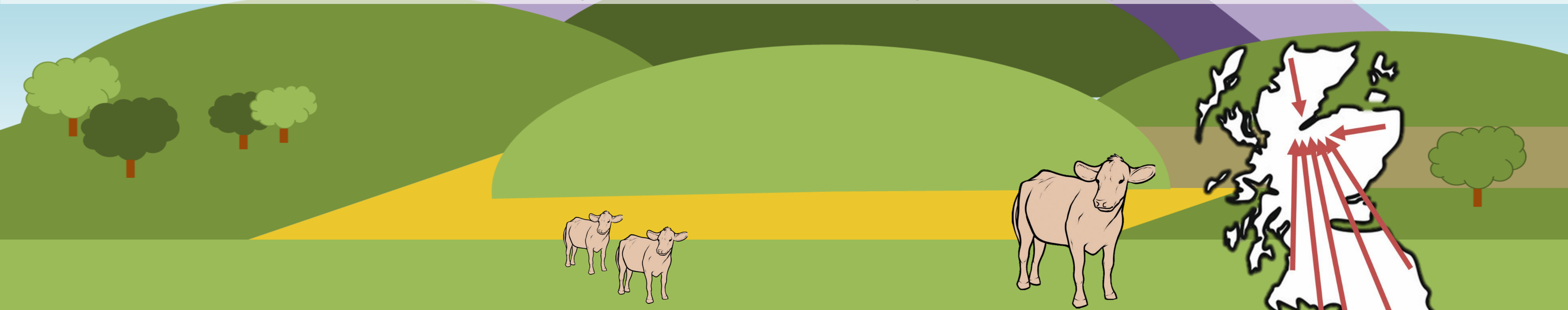


Gillian Maxwell<sup>1</sup>, Madeleine K. Henry<sup>1</sup>, Catriona Webster<sup>1</sup>, Roger Humphry<sup>1</sup>, Judith Evans<sup>1</sup>, Shannon Proctor<sup>1</sup>, Jude I. Eze<sup>1</sup>, Julie Stirling<sup>1</sup>, Ian Hutchinson<sup>1</sup>, Jo Baughan<sup>1</sup>, Maria Costa<sup>1</sup>, Geoff Foster<sup>2\*</sup>, Sue C. Tongue<sup>1\*</sup>

<sup>1</sup>Centre for Epidemiology and Planetary Health, School of Veterinary Medicine, SRUC (Scotland's Rural College), Inverness, United Kingdom

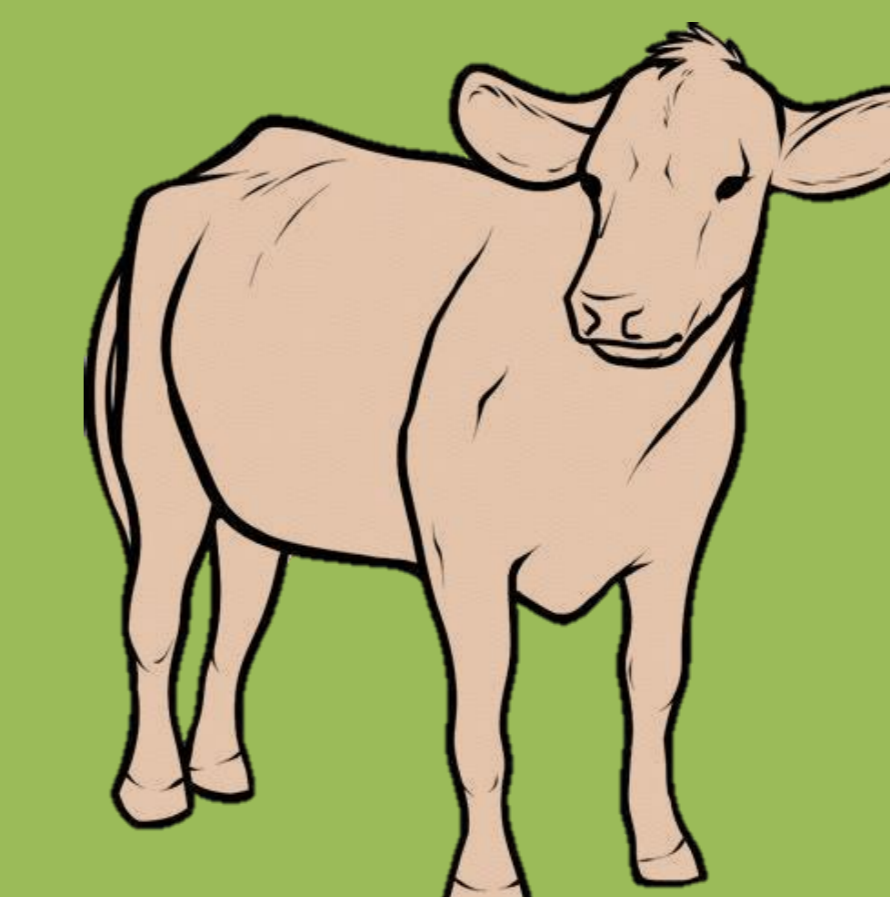
<sup>2</sup>SRUC Veterinary Services, SRUC, Inverness, United Kingdom \*Correspondence: [sue.tongue@sruc.ac.uk](mailto:sue.tongue@sruc.ac.uk) or [geoff.foster@sruc.ac.uk](mailto:geoff.foster@sruc.ac.uk)



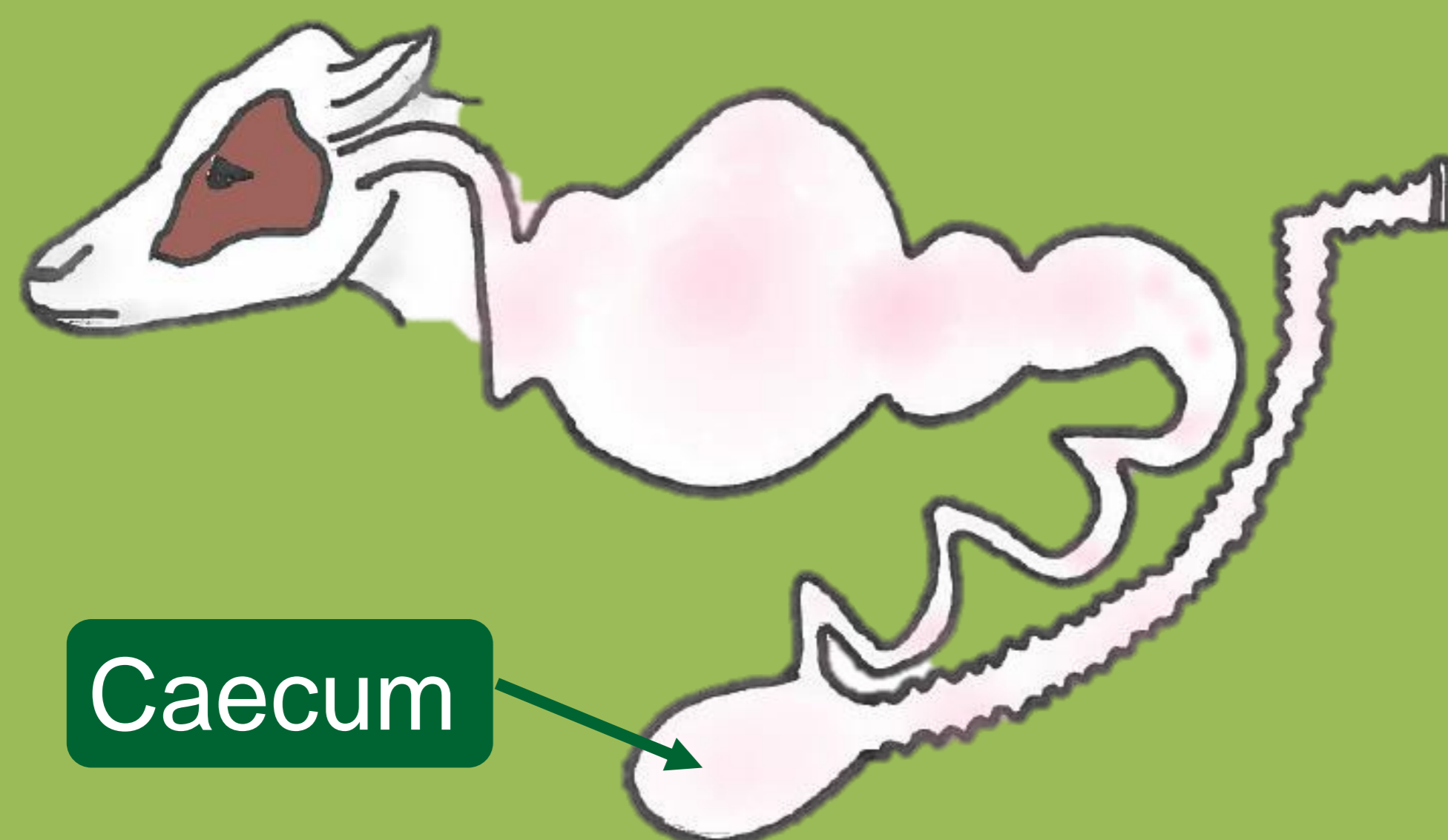
## Healthy cattle were sampled from across Great Britain

Cattle were sampled at participating premises (abattoirs) across Great Britain

A structured sampling strategy based on throughput was used



## Caecal samples were taken from the intestine

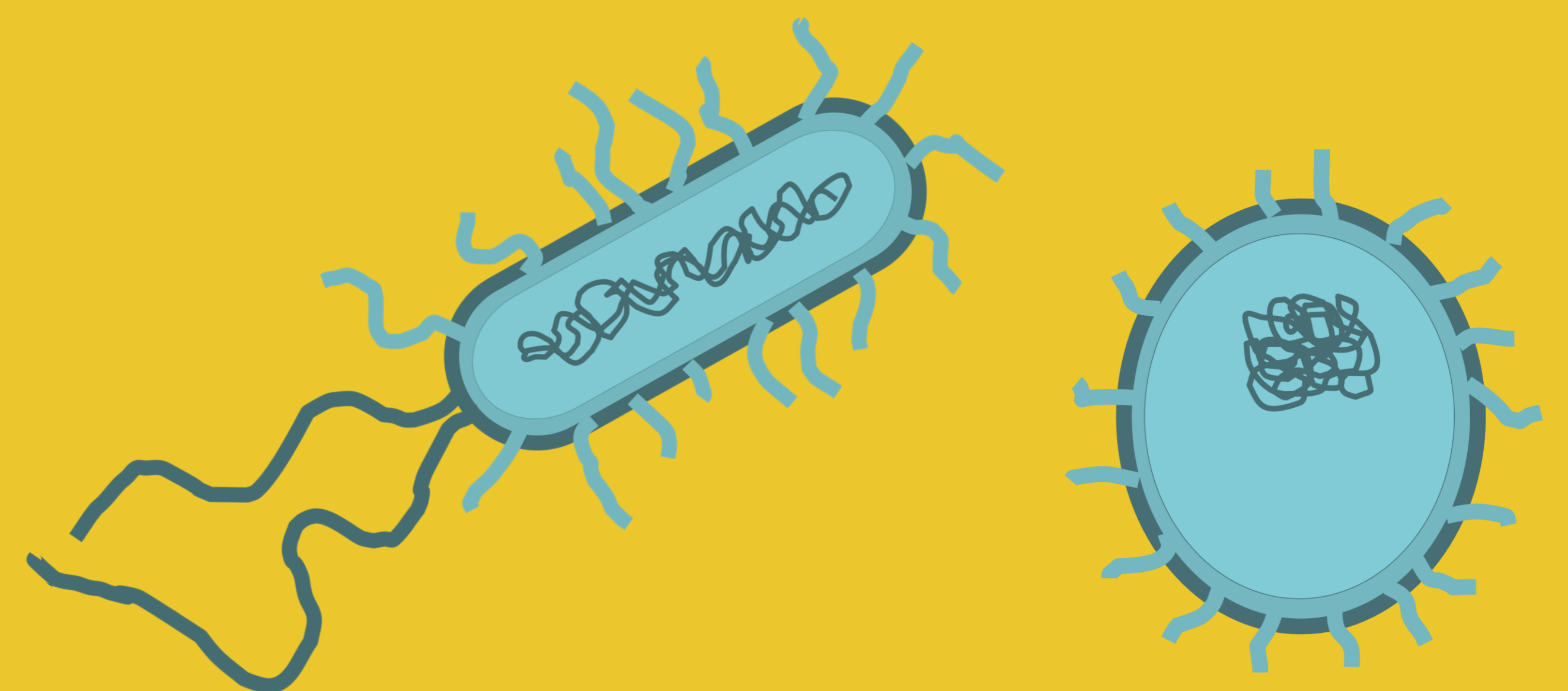


In 2023, over a six-month period 294 samples were collected

A further 66 samples are being collected in February -March 2024

## Five main types of bacteria are being studied

1. Generic *E. coli*
2. Campylobacter
3. Enterococcus
4. Extended-Spectrum  $\beta$ -Lactamase *E. coli*
5. Carbapenemase producing *E. coli*



## Samples are processed in the lab

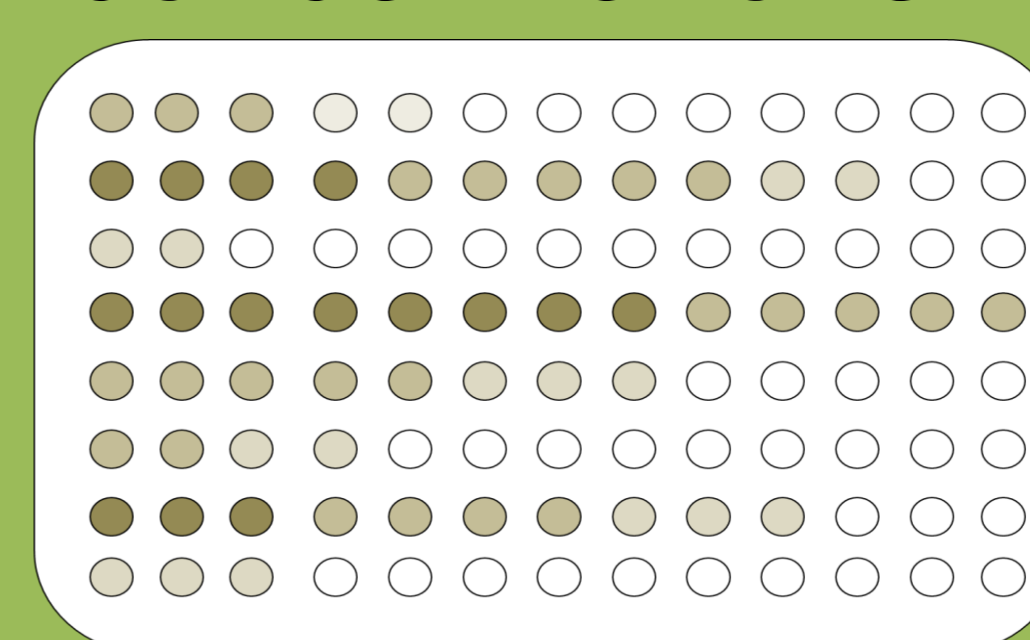
Specific Bacteria Isolated



Biochemical Tests carried out to identify bacteria



Resistance testing of minimum inhibitory concentrations



DNA extracted for sequencing

