

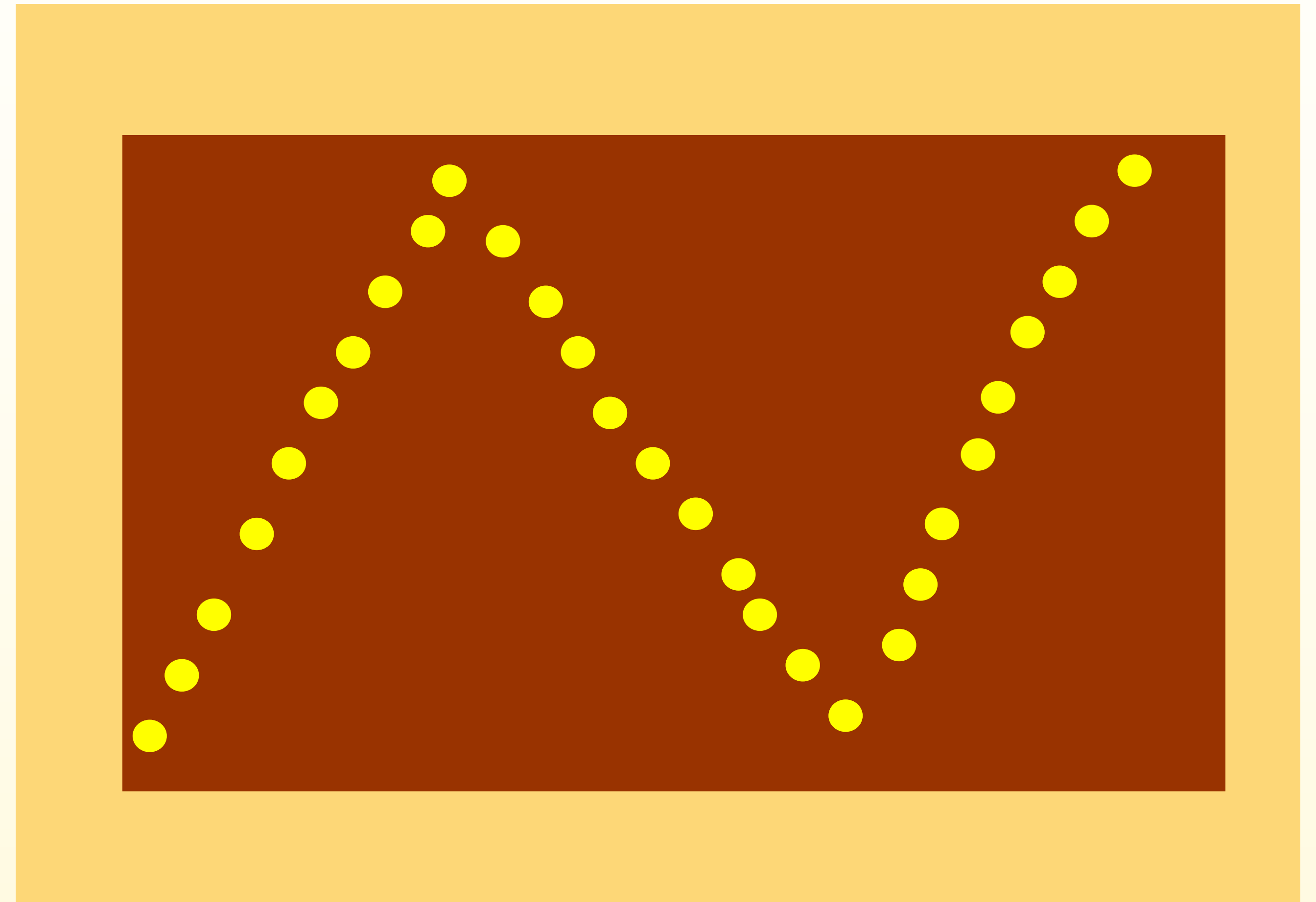
# SOIL TESTING: A KEY TO REDUCING INPUT COSTS

## FERTILISER ADVISORY SERVICE LABORATORY

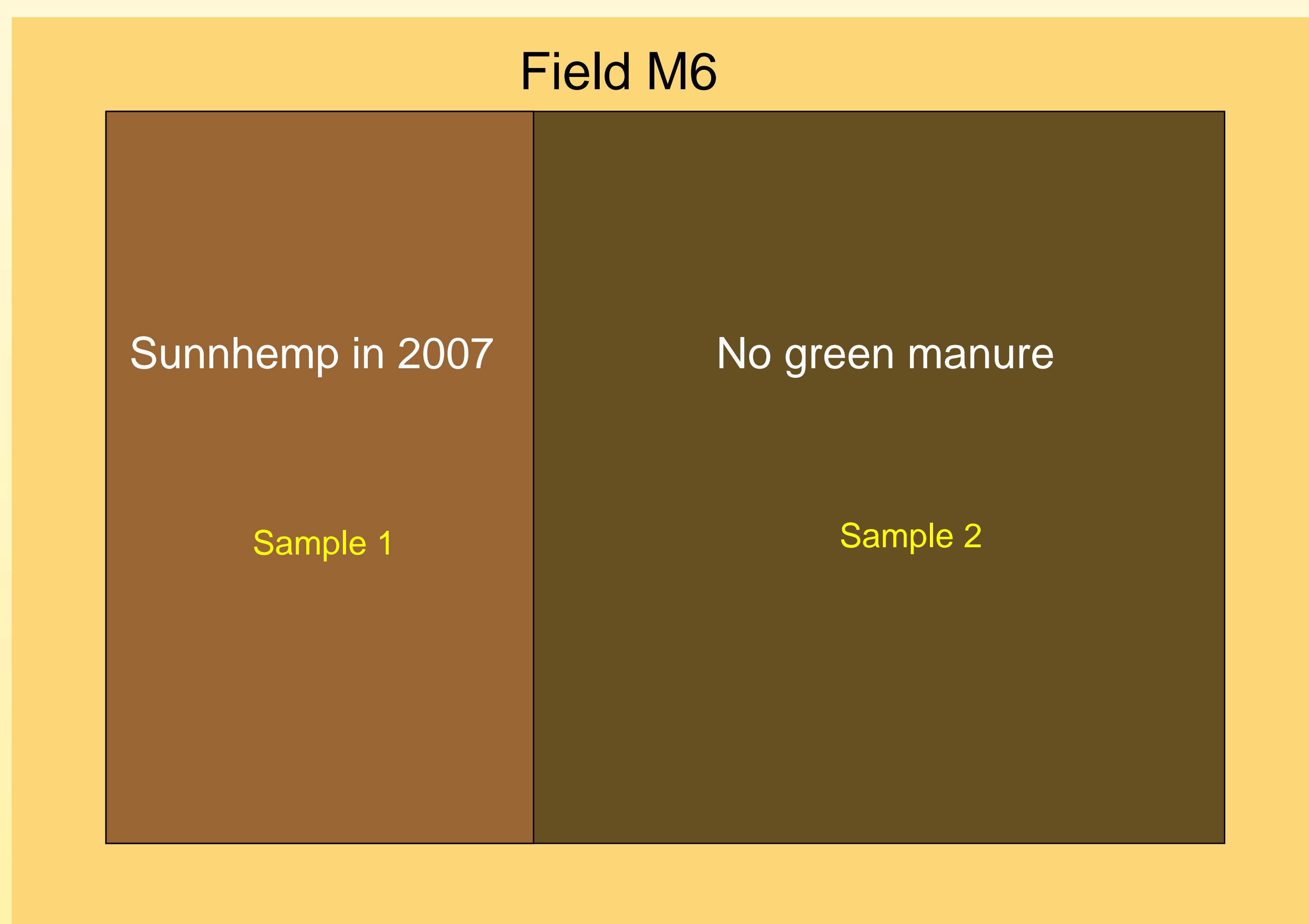
South African Sugarcane Research Institute, P/Bag X02, Mount Edgecombe, 4300, South Africa

### Sampling a field

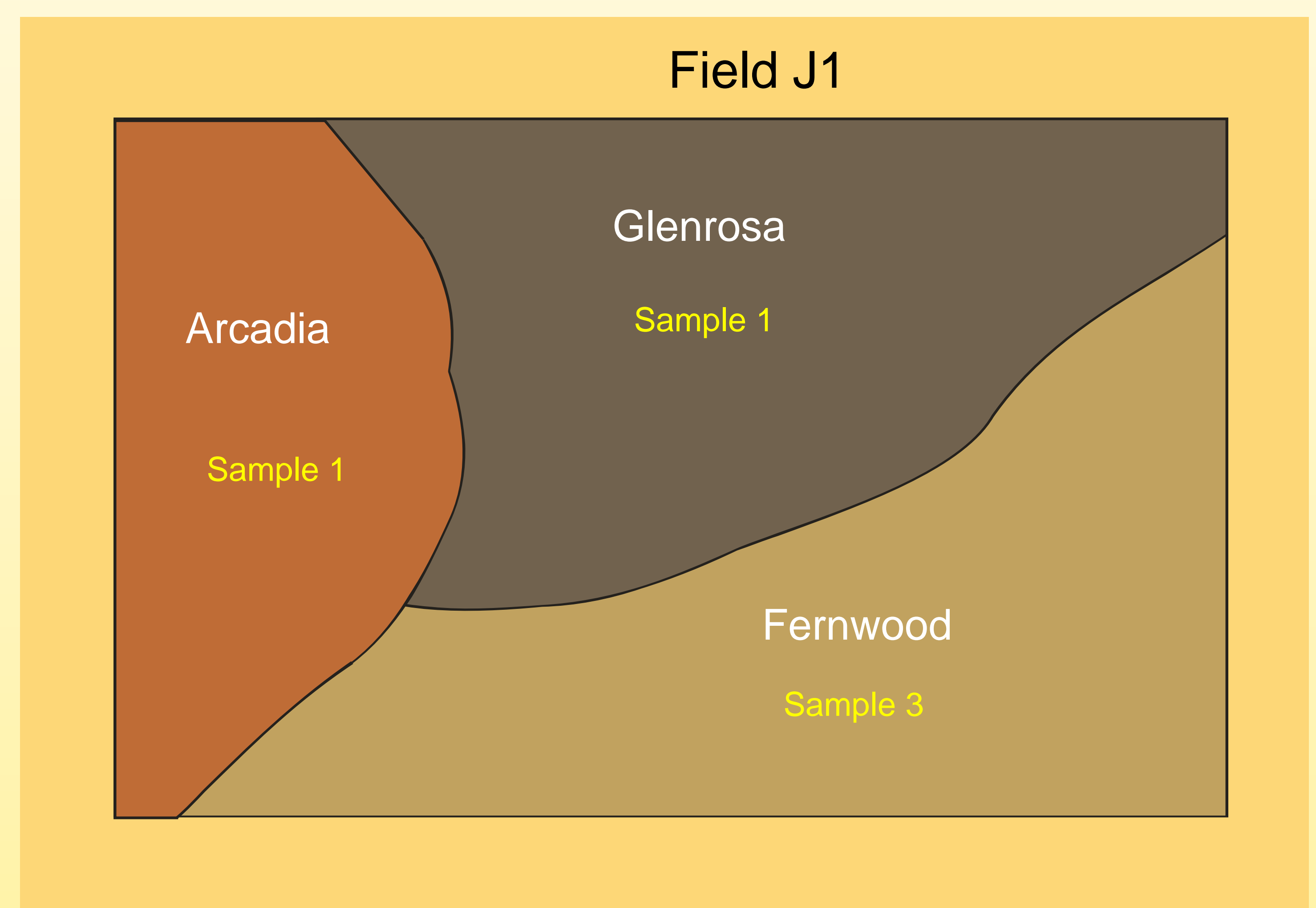
- For topsoil samples, use a Beater auger (NOT a spade or screw-in auger).
- The recommended sampling depth for topsoils is 20 cm.
- For subsoil samples use a screw-in auger.
- Every sample submitted should comprise at least 30 sub-samples taken in a zig-zag pattern across the field. Mix thoroughly to ensure that the sample is representative of the field.
- Transfer approximately 1kg (3 to 4 cups) of the soil into a FAS bag for submission to the laboratory.



### Sampling fields with differing management histories and soil types



Sample the field areas separately



Sample each soil type area separately

Also sample visible 'weak areas' separately.

### Maintain records

#### Soil testing: importance of records

FIELD M6					
Date	Treatment	pH	P	K	Al Sat
Jun 2008	???	5.2	10	89	5

#### Soil testing: importance of records

FIELD M6					
Date	Treatment	pH	P	K	Al Sat
July 2003	50P, 180K	4.9	22	81	22
Sept 2004	30P, 180K	4.8	30	71	30
Nov 2005	30P, 100K	4.7	33	90	35
Feb 2007	30P, 150K, 3t dolomitic	4.6	32	78	40
Jun 2008	???	5.2	10	89	5

By keeping soil test records, growers are able to make more reliable decisions regarding nutrient and lime requirements. For example, spurious values can be ignored, and input rates based on established trends in soil test values.

### Cost

Remember: The cost of a soil test is less than that of 2 kg of fertiliser P.

**SOIL TESTING - A SOUND INVESTMENT!**



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