

2006 Pretoria ADOC project case study

Marker

A pair of specific primers amplifying (in most cases) a specific gene fragment

MarkerProtocol

PCR conditions for gene fragment amplification

Sequencing protocol

ReferenceMarkerAssay

Combination of *Marker* and *MarkerProtocol*

Locus

The different genomic regions amplified by the *ReferenceMarkerAssay*

VariantSet

Different sequences obtained by sequencing of the different fragments produced by the *ReferenceMarkerAssay*

AlleleSet

A subset of *VariantSet* related to a specific *Locus*

GermplasmSample

The DNA sample on which specific PCR is performed for sequencing

Experimental Batch

A plate of PCR products (*GermplasmGenotypeAssay*) to be sequenced

Sequencing machine identification

GermplasmGenotypeAssay

1 *GermplasmSample* with 1 *ReferenceMarkerAssay* is located on 1 *Assay*

RawAssayData

1 trace file for 1 *GermplasmSample* with 1 *ReferenceMarkerAssay*

AssayedVariantSet

The base-called, validated sequence for 1 *germplasmSample* with 1 *ReferenceMarkerAssay*

GermplasmGenotypeStudy

The project itself

UsedmarkerAssay

The set of primer pairs used in the *GermplasmGenotypeStudy*

Note : The project will generate SNP markers that can be assayed on new germplasm. It is another technology and another kind of data, which has to fit the model as well.