

Associations of SNPs in the ovine prolactin and prolactin receptor genes with milk traits in Assaf dairy sheep

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1 - Introduction

- Milk production depends on the number of mammary epithelial cells
- Prolactin (PRL) and PRL receptor (PRLR) genes regulate:
 - ✓ mammary gland growth,
 - ✓ lactogenesis, and
 - ✓ galactopoiesis.

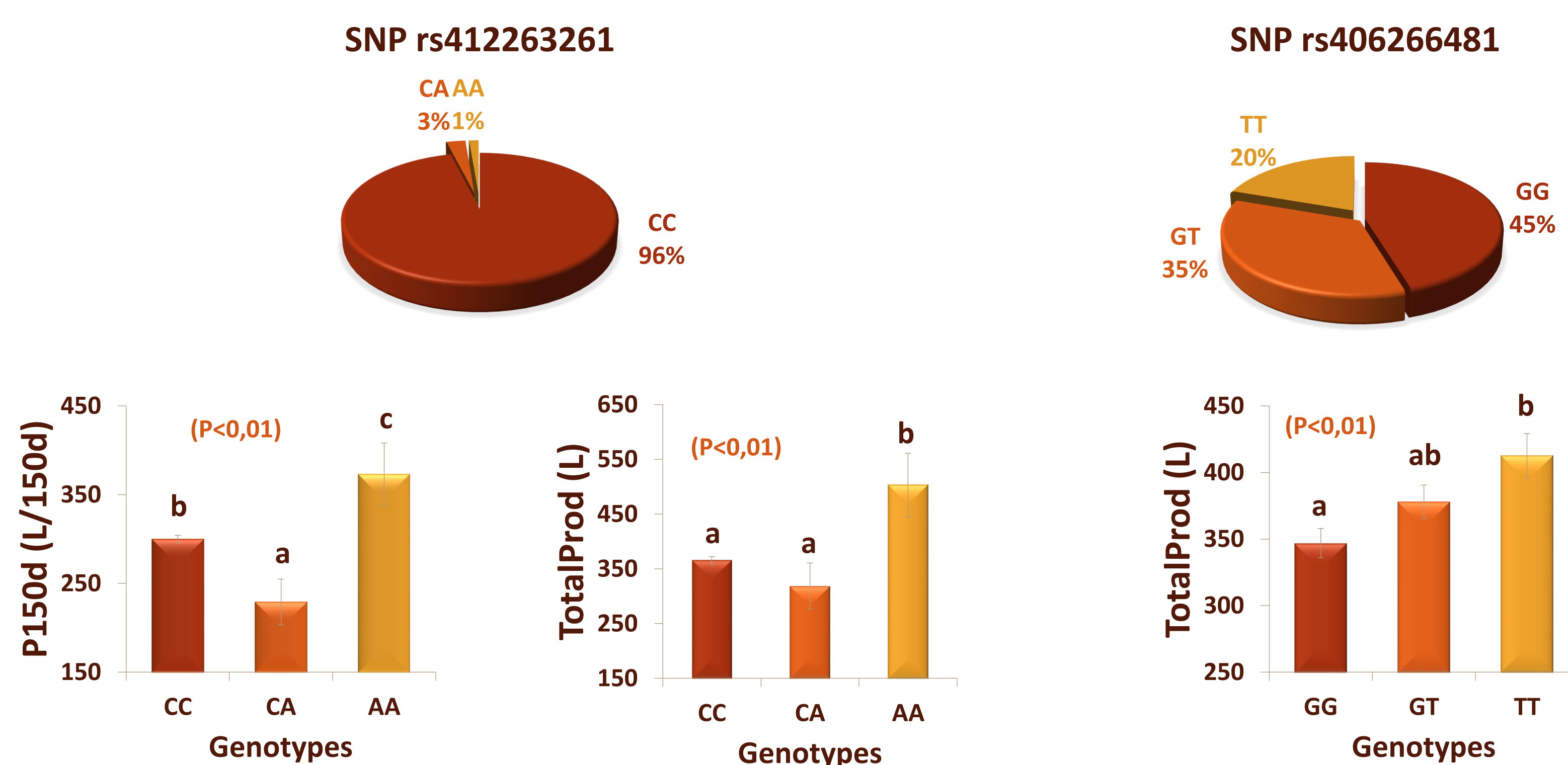
2 - Objectives

Identify SNPs in PRL and PRLR genes associated with milk production traits in Assaf ewes

3 - Results

a) PRL gene SNPs affects P150d and PTotal

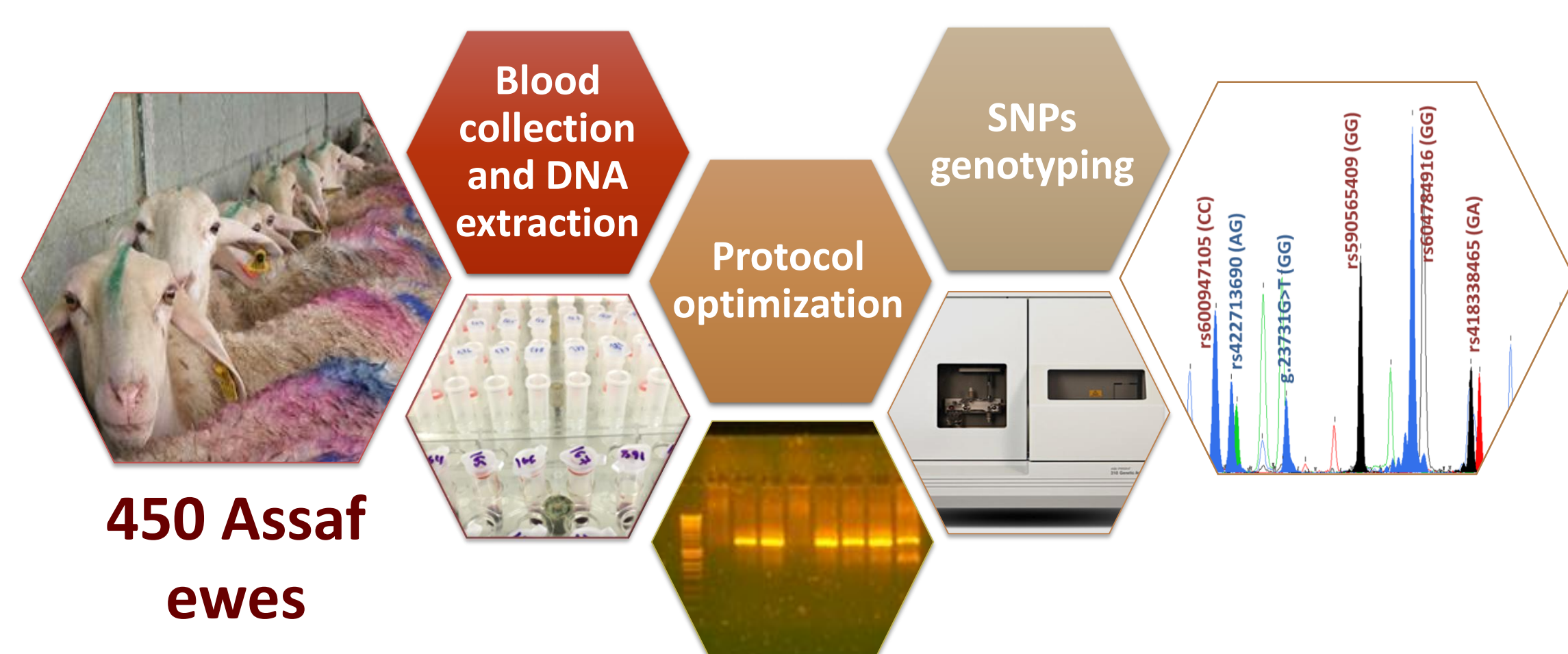
b) PRLR gene SNP affect TotalProd



5 - Material and methods

a) Nine SNPs genotyped by SnapShot analysis

b) Statistical analysis



- Mixed model procedure to disclose associations between genotypes and:
 - ✓ Milk production traits:
 - 150 days adjusted milk yield (P150d),
 - total milk yield (TotalProd), and
 - lactation length (LactL)



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