Candidate resistance gene discovery

- Perennial ryegrass ESTs and GenBank-derived clones
- Cereal R gene orthologs
- Degenerate primers oligonucleotide

Bioinformatic annotation for functional role

- Amino acid alignment
- Motif analysis

R-gene characterisation and classification into distinct classes and families

R gene sequence similarity and relationship to macrosynteny

SNP discovery in F₁(NA₆ₓAU₆) parental genotypes

SNP validation and genetic mapping

Association of SNPs with resistance loci in perennial ryegrass and cereal species

Figure 1