Breeding the best

Subterranean clover is an exotic name for a common plant.

Non-agricultural types might assume that it grows under the ground, but while it releases its seeds underground, sub clover, as it is generally referred to, definitely manifests itself above ground.

It is the most widely-sown annual pasture legume in Australia, with estimated plantings of about 22 million hectares across the southern half of the country.

With diseases, global warming and hostile soils to contend with, sub clover has a battle to remain as resilient and useful as it used to be.

The Centre for Legumes in Mediterranean Agriculture (CLIMA) recently brought together the collaborators of an ARC linkage project who are working towards breeding elite cultivars of sub clover for sustainable and profitable farming systems.

Agricultural scientists from around Australia and a molecular geneticist from Japan, Dr Sachiko Isobe from Kazusa DNA Research Institute, met to assess their progress, half-way through their project.

“We have more than 10,000 buckets of seeds in South Perth (Department of Agriculture and Food WA),” said Professor William Erskine, Director of CLIMA. “They represent sub clover from all over the world. We are trying, with molecular breeding, to develop a super sub clover for the future.

“This will be a focused core germplasm collection, but not just for WA. It will be a global resource, that will be as useful in Spain or Morocco as it is here,” he said.