



How does Sappi maintain genetic diversity?

Our breeding programmes have an extensive collection of eucalypt genetic material, comprising more than 20 eucalypt species from Australia and Indonesia. This valuable genetic resource gives our breeders the flexibility to identify the most suitable material for our end uses in terms of growth and fibre properties. This gene pool will also allow for some protection against pests and diseases that could challenge the species and taxa in the future.

Does Sappi conduct genetic research?

Sappi improves its planting stock using conventional breeding by selecting and crossing superior individuals, much like the breeding in other commercial plant crops.

As part of this process, *Eucalyptus* hybrids have been developed for several reasons, including: to combine the desired traits of two different species; to exploit hybrid vigour, and to increase adaptability to areas that are marginal for either of the parent species. We have commercialised two eucalypt hybrid crosses with superior disease resistance and yield gains of about 30% compared to pure *E. grandis* seedlings.

We also make use of various cutting edge molecular tools that allow us to determine varietal identity and pedigrees of the populations we work with as well as better understand processes of commercial interest, such as the genetic control of wood formation and disease resistance. Key to our breeding process is the use of molecular resources (e.g. DNA markers) to select superior trees at a younger age and also increase selection intensities, thereby accelerating our breeding initiatives.

Does Sappi grow genetically modified trees?

We do not plant or process any genetically modified (GM) trees in line with current Forest Stewardship Council™ (FSC™ N003159); and Programme for the Endorsement of Forest Certification™ (PEFC/01-44-43) standards. However, we have taken the decision to understand the challenges and risks associated with GM tree crops. While we envisage possible environmental, social and reputational risks, this may be a potential method to adapt our future plantations to a changing climate.

Fast facts

- Our extensive collection of eucalypt genetic material enables our breeders to identify the most suitable material for our end uses in terms of growth and fibre properties.
- We use conventional breeding methods to improve our planting stock.
- We are developing use of DNA markers to select superior trees.
- We do not plant or process any genetically modified trees.