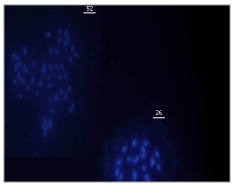
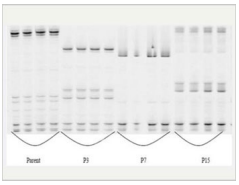
Polypoldisation

"Polypoldisation technology is a scientific process first discovered in the 1970's which is well established in the agri-food business, having been successfully used to encourage faster rates of growth in common crops such as corn, wheat, barley, rice sugarcane, cotton and sorghum. The polyploidy technology has only recently been applied to the forestry industry the successful application of which has increased the biomass yield and shortened growing times in eucalyptus, willow, and poplar tree varieties".

Polypoldisation results in the trees (itself a solar system through the process of photosynthesis) to grow leaves (solar panels) which are 50% larger than a standard variety of the same tree species, thereby enabling it to more efficiently collect solar energy and CO2 and, accordingly, grow more rapidly. Further, no genetic engineering is utilized, as polyploidy is a naturally occurring evolutionary event. Importantly, the resulting enhanced photosynthetic process enables the trees to consume larger quantities of carbon creating a carbon "sink" as they grow faster and more efficiently produce and release oxygen into the atmosphere.



Chromosome count of a tree showing the standard 26 and a clone having 52 Chromosome count.



We have the DNA profile of the parent plant on the left, then the modified clones of p3, p7, p15. Each dash represents a DNA segment. The bottom line of dashes of all of the DNA profiles proves that all tested plants are derived from the mother plant. The differing DNA segments on the higher lines prove that all modified plants have been rearranged at the molecular level to adapt to a specific set of environmental conditions.

Plant Science

Polypoldisation

Biotechnology