

MWP – Young Researcher Abstract 2026

Project title: The Allelic Bank: The Hidden Capital Securing the Future of the Forest Sector	
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Abstract (approx. 200 words): Our research focuses on the genetic characterization and diagnosis of Eucalyptus base populations in Brazil, including introduced materials and locally adapted populations shaped by generations of selection. Our findings reveal an untapped genetic asset with potential to drive efficiency, sustainability, and long-term resilience in the forest sector. These populations form a true “allelic bank”: irreplaceable reservoirs of genetic diversity, critical for innovation and adaptation under increasing climate pressures. In some cases, they represent the last remaining sources of genetic material no longer found in their centers of origin. Notably, underexplored provenances such as those from Wetar Island adapted to harsh environments, already show remarkable productivity even without breeding, highlighting clear opportunities for future genetic gains. At a time when Brazil leads the global forest sector and the “Pulp Valley” in Mato Grosso do Sul continues to expand, leveraging this hidden capital is no longer optional, it is essential. My vision is to transform underutilized diversity into performance by integrating research, breeding, and industry, overcoming genetic erosion and inefficiencies, and building resilient, competitive, and sustainable production systems that secure lasting benefits for society.	
Key words: Genetic Diversity, Climate Resilience, Sustainable Forestry	