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LEONARDO ABSTRACT SERVICES (LABS) 2010-2011 THE SENSORIAL INVISIBILITY OF PLANTS: AN INTERDISCIPLINARY INQUIRY THROUGH BIO ART AND PLANT NEUROBIOLOGY

By Laura Cinti

The thesis, titled 'The Sensorial Invisibility of Plants: An Interdisciplinary Inquiry through Bio Art and Plant Neurobiology', is an interdisciplinary art practice-related research that focuses on the complexities in recognising plant behaviour. It explores the contradistinction between scientific studies that reveal cognitive capacities in plants and our subjective perceptions where plants appear motionless and devoid of sensation.

The difficulties inherent in perceiving plants' interactions with their environment are concerned with physiological processes in plants, their morphological adaptations and temporal disparities. Thus, technoscientific interfaces utilising genomic and electrophysiological approaches offer unprecedented scopes to extend our perceptual boundaries and reveal plants' behavioural qualities.

In biological art practices, scientific approaches and methodologies are deployed to empathetically explore intrinsic biological expressions in plants through aesthetics, genetics and electrophysiology. The thesis critically examines issues thrown up when scientific strategies are incorporated into artworks by questioning the role of the interfaces (i.e. green fluorescent protein or electrodes) and their authenticity in revealing aspects of plant responses and expressions.

The practical aspects of the research draw on experimental approaches (using time-lapse, fluorescence and nanotechnology) to modulate plant motion into our frame of reference. In doing so, it investigates whether our subjective experience can be consolidated with the sensorial image of plants emerging from the sciences.

Accompanying the written thesis is a visual documentation of the research's practical component in the form of a multimedia DVD

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