

CHLOROPHYLL PRINTING AS AN ART PRACTICE

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Chlorophyll printing, as an alternative photographic process, has emerged as a captivating avenue within contemporary art, offering artists a unique way to engage with nature, explore sustainability, and challenge conventional notions of photography. In a world increasingly concerned with environmental degradation and the impact of human activity on the planet, this organic technique resonates deeply with themes of eco-consciousness and the interconnectedness of all living beings.

At its core, chlorophyll printing embodies a symbiotic relationship between art and nature. Unlike traditional photographic methods that rely on chemicals and synthetic materials, chlorophyll printing utilizes the natural pigments found in plant leaves, primarily chlorophyll, to develop images. This process aligns with the principles of eco-friendly artmaking, minimizing the use of harmful substances and embracing sustainable practices.

Objective of the project: to develop aesthetic products / prints exploring different type of leaves and observe unique contrast and tonal range (see figures 1-3) that create sun of each peace.



a) Flower, leaf *Hedera Helix*



b) The Great Wave off Kanagawa, leaf
Xanthosoma Robustum

Figure 1 – Chlorophyll printing (own elaboration)

One of the most compelling aspects of chlorophyll printing is its reliance on photosynthesis, the natural process by which plants convert light energy into chemical energy. As artists place light-sensitive substrates, such as paper or fabric, against leaves and expose them to sunlight, the chlorophyll pigments undergo chemical changes, resulting in the gradual formation of photographic images. This direct interaction between sunlight, plants, and printed acetate with an image to

transfer creates a dynamic interplay between the elements of nature and the artistic process.



a) Insect, leaf *Duranta Plumieri*



b) Libélula, leaf *Philodendron Radiatum*

Figure 2 – Chlorophyll printing (own elaboration)

In contemporary art, chlorophyll printing serves as a means of exploring themes related to ecology, sustainability, and the fragile balance of ecosystems. Artists who engage with this technique often seek to highlight humanity's interconnectedness with the natural world and raise awareness about environmental issues. By foregrounding the organic materials and processes involved in chlorophyll printing, these artists challenge viewers to reconsider their relationship to the environment and reflect on the impact of human activity on the planet.

Furthermore, chlorophyll printing offers a departure from the fast-paced, digital-centric culture of contemporary society. In an age dominated by screens and virtual experiences, this hands-on, labor-intensive process encourages artists to slow down, reconnect with the physical world, and embrace the imperfections inherent in organic materials. The unpredictability of chlorophyll printing results in serendipitous outcomes, where each print bears the unique marks of its natural environment, emphasizing the beauty of impermanence and the passage of time.

The beauty of imperfect form of each leaf lies in its celebration of nature's inherent variability and impermanence. Unlike traditional photographic processes that often strive for perfection and precision, chlorophyll printing embraces the organic unpredictability of plant materials, resulting in images that are rich in texture, nuance, and character.

Each leaf used in chlorophyll printing carries its own unique history, shaped by factors such as its species, age, and environmental conditions. As artists place these leaves against light-sensitive substrates and expose them to sunlight, the resulting prints capture not only the visual outlines of the leaves but also the intricate details of their surfaces—the delicate veins, the irregular edges, the subtle imperfections.



a) San Miguel Arcangel, leaf Hibiscus

b) *Señor de la Misericordia*, leaf Euphorbia

Figure 3 – Chlorophyll printing (own elaboration)

Moreover, chlorophyll printing invites artists to experiment with the expressive potential of plant materials and explore the intersection of photography with other artistic disciplines, such as botany, ecology, and environmental activism. Through interdisciplinary collaborations and innovative approaches, artists expand the boundaries of traditional photography and forge new avenues for creative expression. Detailed description of the complete workflow of the print process you can read in our article: *Chlorophyll printing by nature (through the action of photosynthesis): an alternative photographic process where images are developed on natural leaves* (Canela, O. T & Gurieva N. 2024).

In conclusion, chlorophyll printing occupies a distinctive position within contemporary art, offering a compelling synthesis of aesthetics, sustainability, and ecological awareness. As artists harness the power of sunlight and plant pigments to create images, they invite viewers to contemplate the interconnectedness of all life forms and consider the profound implications of human intervention in the natural world. In an era marked by environmental urgency, chlorophyll printing serves as a poignant reminder of the beauty and resilience of nature, inviting us to embrace a more harmonious relationship with the planet we call home.

References

1. Canela, O. T., & Gurieva, N. (2024). Fotografía impresa al natural: la clorotipia como procedimiento alternativo de impresión de imágenes en plantas. *Zincografía*. <https://zincografia.cuaad.udg.mx/index.php/ZC/article/view/223/547>.