Common Flowers / Flower Commons

Project Description

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Abstract

The *Common Flowers* projects is based on the first commercially available genetically modified flower, the blue "Moondust" GM carnation developed and marketed by japanese beer-brewing company Suntory. But although Suntory applied for and was awarded with permission to grows this GM plant in its key markets, it chooses not to. Instead the GM blue flowers are grown in Columbia, harvested, and shipped as cut-flowers to the worldwide markets.

With *Common Flowers* we reverse the plant growing process, by growing, multiplying and technically 'cloning' new plants from purchased cut-flowers using Plant Tissue Culture methods. The blue GM carnations are brought back to life using DIY biotech methods involving everyday kitchen utensils and easily purchasable and ready materials.

And because the plants are officially considered "not harmful" and therefore legally permitted to grow outside, we took the next logical step and released the blue GM carnation into the environment. This action should ask questions about the state of intellectual property, ownership and copyright issues surrounding the bio-hacking and bio-bending of plants. Our goal is to make these flowers available as shared *Common Flowers* and to create the free spaces, where they can grow and prosper, in a *Flower Commons*.

Background

First, the feat of introducing blue colours into the flower petals has been achieved by introducing genes and their genetic pathways from other flowering plants into the genome of Dianthus caryophyllus L. (carnation). Traditional non-molecular breeding efforts did not allow for blue carnations to emerge. Second, and cultural-historically more important, Suntory's Moondust range of carnation represents the first commercially available genetically engineered consumer product intended purely for aesthetic consumption.

Unlike previous attempts of introducing GM products to the wider markets (Flavr Savr Tomatoes, etc) the GM carnations are neither used as human food nor animal feed and are therefore bypassing exposed discussions and sensationalist uproars in

the media.
The plant and its transgenes are not considered part of the food-chain and are therefore considered 'environmentaly safe'. However, like any other GM product strict protocols and even stricter tests had to be followed, in order to get scientific proof that the flowers pose no threat to animals and wildlife, and can be kept under control. This approval was essential to allow Suntory to market and sell the GM flowers to the consumer. Following this official acceptance, Suntory's blue carnations became members in an elite club of legally-approved GM plants.

Common Flowers

Our artists interest in this situation stems from the discrepancy between the legal allowance to grow GM plants in most target countries and on the practice of Suntory of out-sourcing the growing processes to specialized plant-growing farms, mainly in South America, and there especially in Colombia.
With Common Flowers we aim to bridge this discrepancy by developing methods for growing and "re-animating" the blue GM flowers. By bringing back to life the slowly dying cut-flowers using basic Plant-Tissue Culture (PTC) and a home-made DIY laboratory set-up, we are able to create a stable population of transgenic blue carnations, we created our *Common Flowers*.
The next logical step is to deliberately introduce (and in a poetic sense: set free) the GM carnations in the environment, with the goal of establishing a free and feral population of Common Flowers at certain, shared loci - to create *Flower Commons*.

Flower Commons

Flower Commons are the shared spaces, which will be marked by the release and continuous presence of the blue GM carnations. The Flower Commons will act as a self-sustaining source for Common Flowers. Until now the only choice to propagate the blue carnations, is to purchase them as cut-flowers. With *Flower Commons* we introduce another - free and open source - choice.
It has not escaped our notice that the specific pairing (Common Flowers - Flower Commons) we have postulated, immediately suggests a possible copying mechanism for the indefinite propagation of flowers. The locations of the *Flower Commons* will be made publicly available in the near future. At the moment we content ourselves to a closed Beta release, as we still can not judge the wider public reaction towards the released plants. We can however confirm, that the blue carnations have been successfully release in the areas of Setagaya, Japan and Cologne, Germany.

Bio-sharing, Bio-hacking and Open-sourcing

Common Flowers proposes a mechanism of bio-sharing. By freeing ('jail-breaking') the flower from its destiny as a cut-flower and establishing a feral and more 'natural' population of blue carnations, the flower will be given a chance to reconnect to the general gene-pool and to join again the evolution through natural selection.
Common Flowers hopes to touch is the question of patents on plants and on life-forms in general. In particular what form of legal protection for their plants was granted and does the act of simply growing plants constitutes a violation of Suntory's copyright. Is this reverse Bio-piracy?
Our interested is not only focused on the artistic possibilities of the emerging 'bio-media' and 'wet-ware', but rather more in the social consequences that these technologies afford. The keys point of the research effort are therefore not in answering specific research questions, but in opening up - in the artist's opinion - relevant topics for discussion and participation.

Possible Exhibition Setups

The exhibition set-up presented at the Nam June Paik Award Exhibition at the Wallraf-Richartz Museum in Cologne in 2008 - and in the video documentation - showed an ad-hoc set-up lab and a "clean room" made from discontinued exhibition furniture. By "hacking" into the infrastructure of the museum, we were able to re-configure the exhibition space itself and the expectations of the visitors, mostly of whom came - without doubt - to enjoy the paintings of van Gogh, Rembrandt and Monet.
The other part, only shown at images in the exhibition, consist of the release of the plants into the environment and the creation of maps showing the details of the plant, the location, its general state and the likeliness for successful growth.