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SauColors, an Alternative to Chemical Dyes

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The textile industry is responsible of 20% of the industrial water pollution and 85% of this damage is caused solely by its dyeing process. Saucolors is a project that addresses this wicked problem by creating a biodesigned pigment obtained from the elderberry fruit. In Bogotá, Colombia around 85,720 elder trees are present in the public space and of which when in harvest its berries lie on the floor representing around 4000 tons of wasted elderberries.

The elderberries were unnoticed until they appeared as large blue spots on the cities pavement. Hence the question arose: is it possible to use the elder tree berries in order to obtain a textile pigment? Anthocyanins give fruits its color, specifically cyanidin is responsible for its purple characteristic found in the elderberry. However, there are many factors that must be taken into account when transferring a stable pigmentation onto a textile fabric.

By collecting fruit samples, a rigorous experimentation system condensed into a mathematical formula ($XM + XF + XpH + X \text{ Temp} + XT = XC + XW$). Its purpose is covering the largest number of variables such as Ph, Temperature, Time, Mordant, among others, which affect duration and color composition. Allowing to build a unique path for each specific color, the formula with its variables is consigned onto what is called the Sambook. The color manual is a local, sustainable and scalable alternative to the environmental impacts generated by current the current textile industry.

SauColors has been taken from the lab to the market, creating a commercially viable solution. As part of this new chapter, it is now collaborating with an international sneaker brand launching a capsule collection to the market. Although SauColors is a young start-up, it has managed onto creating a sustainable circular scalable solution as an alternative to textile dyeing.