

Potential and limits for natural dyes production in Europe

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Numerous plants are able to produce dyes or pigments or tanins.

This article includes two “uncomplete inventories” under the form of “interactive” spreadsheets (Excell ® files):

- a “botanical listing” of plant species (more than 100 species) allowing production of pigments and dyes with their botanical main features (scientific names, names in main languages, growth habits, ecology, plant parts used for dye extraction, colours generated, alimentary use, ...)
- a “chemical listing” of dyes chemical families with their properties and uses, and the plants species producing the dyes or related materials (pigments, tanins, ...)

These spreadsheets are interactive in the meaning that they may be used for various purposes depending on the criterias chosen for sorting, on the query tools, links between sheets and also that they can be easily completed by any user and exchanged between users.

On basis of these listings, some considerations are given in relation to:

- the diversity of vegetal dyes
- the diversity of plants species
- the differences between plants species that will be picked up “in the nature”, “in the wild” and plants that could easily be grown in agriculture or improved by breeding and by cropping systems adaptations,
- an attempt to indicate which plants are more adapted for a “today” use as alimentary colourant, as textile dye or for other purposes, the interest and weaknesses of these plants and their dyes compared to synthetic equivalents, and the bareers that must be overcome in order to promote any agricultural production.
- brief summaries of “agricultural features” for several species already grown or that the authors have imagined as prone to a rapid and successful domestication.

The files will be available to anyone from the day of the Bologna Conference by request to the authors or at the internet address www.fsagx.ac.be/pt/dyes and at a website the Conference organisers would accept to indicate during the meeting.