



Lost Yellows

Para verificar a hipótese de existência de *Lost Yellows*, iremos reproduzir tintas medievais, usando os extractos de uma selecção representativa de plantas encontradas em Portugal, que serão recolhidas em expedições botânicas.



Extractos



Têxteis tingidos

FLORA PORTUGUESA

Coordenado por Adelaide Clemente

Anthemis tinctoria

Dyer's Camomile

Margarida (Pt)

Anthemis arvensis; C. fuscatum; C. mixtum



Carthamus tinctorius

Safflower

Cártamo (Pt)

Carthamus lanatus



Cotinus cogygria

Sicilian Sumac

Sumagre (Pt)

Rhus coriaria



Crocus sativus

Saffron

Açafrão (Pt)

Crocus serotinus



Daphne gnidium

Flax-leaved daphne

Trovisco (Pt)



Genista tinctoria

Dyer's broom

Tojo-do-Sul (Pt)

G. hirsuta, G. triacanthose, G. tournefortii



Reseda luteola

Weld

Lírio-dos-tintureiros (Pt)



Rhamnus spp.

Buckthorn

Espinheiro-preto (Pt)



Serratula tinctoria

Sawwort



Solidago virgaurea

European goldenrod

Vara-de-ouro (Pt)

FLORA PORTUGUESA

Coordenado por Adelaide Clemente

Anthemis tinctoria

Dyer's Camomile

Margarida (Pt)

Anthemis arvensis; C. fuscatum; C. mixtum



Carthamus tinctorius

Safflower

Cártamo (Pt)

Carthamus lanatus



Cotinus cogygria

Sicilian Sumac

Sumagre (Pt)

Rhus coriaria



Crocus sativus

Saffron

Açafrão (Pt)

Crocus serotinus



Daphne gnidium

Flax-leaved daphne

Trovisco (Pt)



Genista tinctoria

Dyer's broom

Tojo-do-Sul (Pt)

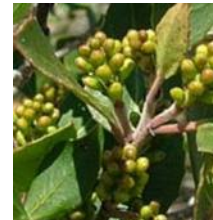
G. hirsuta, G. triacanthose, G. tournefortii



Reseda luteola

Weld

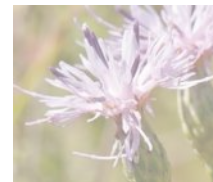
Lírio-dos-tintureiros (Pt)



Rhamnus spp.

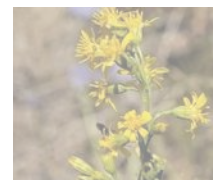
Buckthorn

Espinheiro-preto (Pt)



Serratula tinctoria

Sawwort



Solidago virgaurea

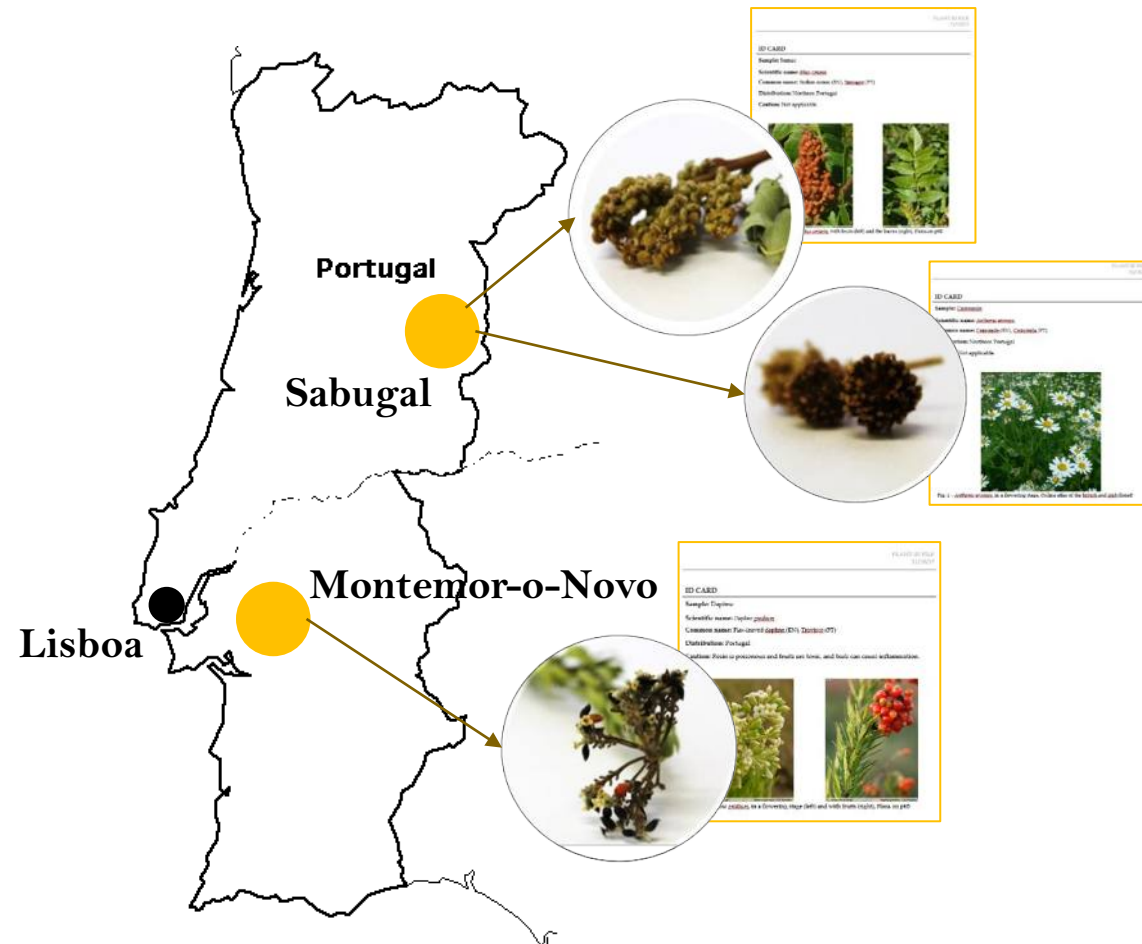
European goldenrod

Vara-de-ouro (Pt)

1



Espécies recolhidas e guardadas
com um *Herbarium voucher*



“Taxonomy itself depends for documentation not upon names or descriptions, but upon individual plants preserved in some way, as permanent objects of reference”

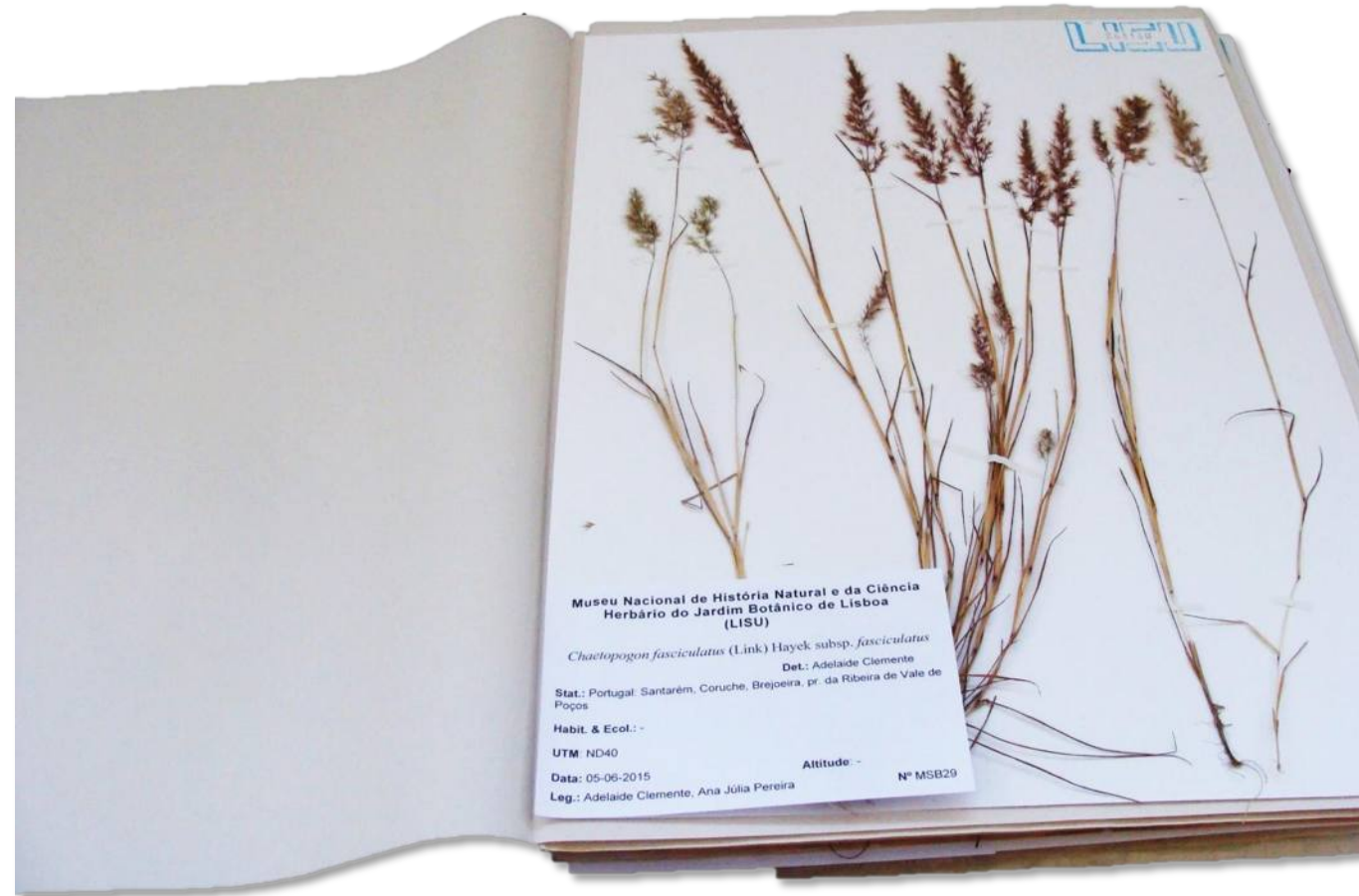
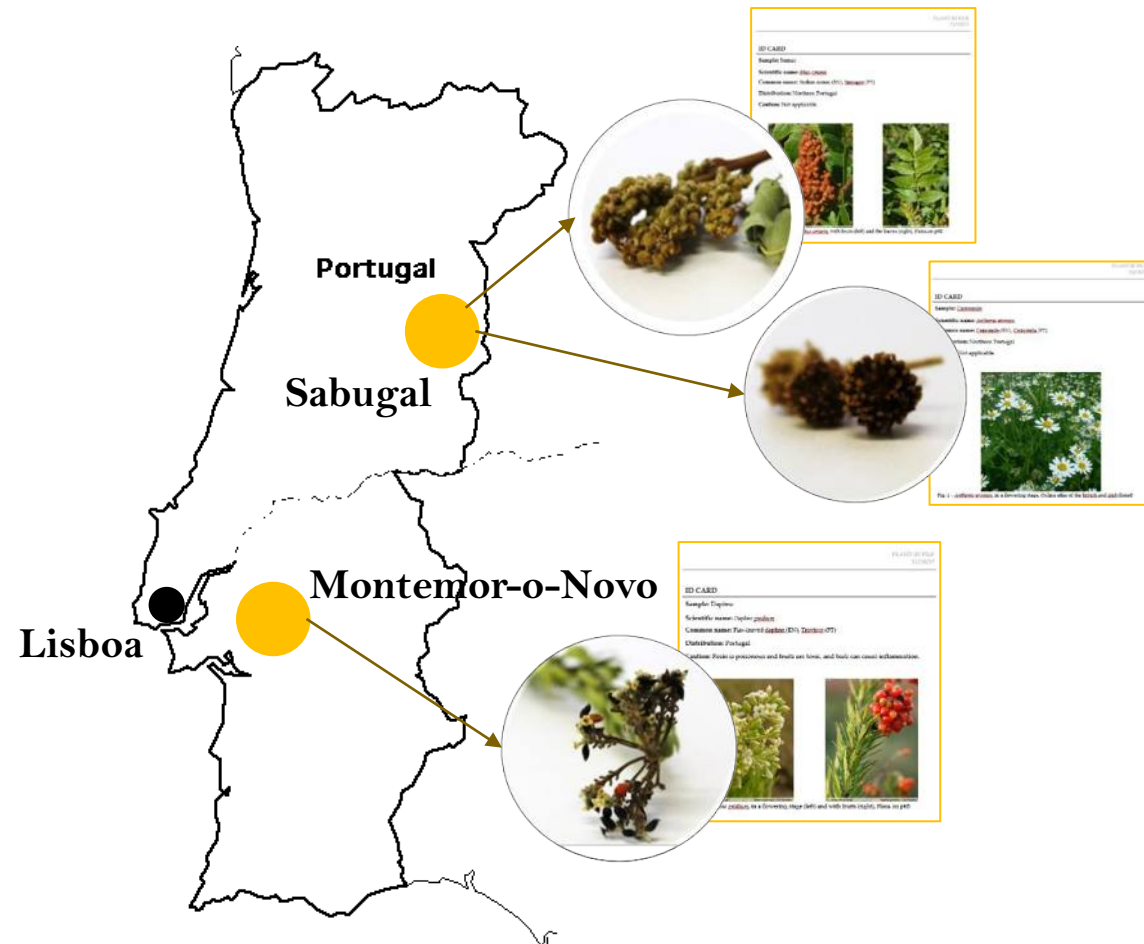
FLORA PORTUGUESA

Coordenado por Adelaide Clemente

1



Espécies recolhidas e guardadas
com um *Herbarium voucher*



Anthemis tinctoria
Dyer's Camomile
Margarida (Pt)



Anthemis arvensis



Chamaemelum fuscatum



Chamaemelum mixtum



Daphne gnidium
Flax-leaved daphne
Trovisco (Pt)

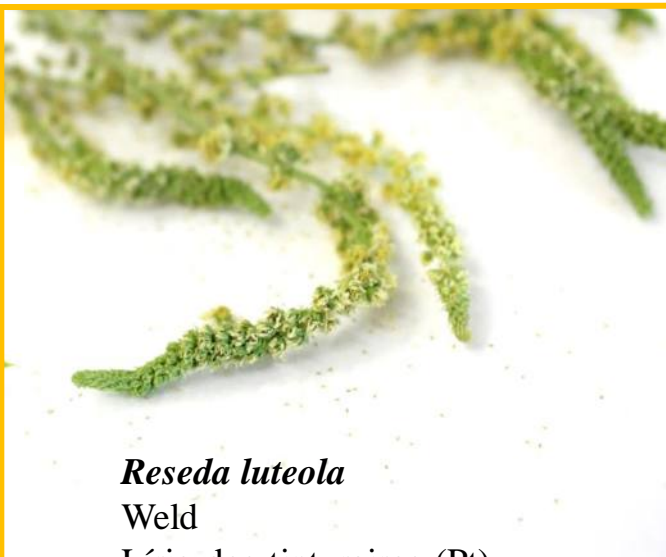


Cotinus cogygria
Sicilian Sumac
Sumagre (Pt)



Rhus coriaria

Rhamnus alaternus
Buckthorn
Espinheiro-preto (Pt)



Reseda luteola
Weld
Lírio-dos-tintureiros (Pt)



Genista tinctoria
Dyer's broom
Tojo-do-Sul (Pt)



Genista tournefortii



Genista triacanthos

FONTES PORTUGUESAS DE CORANTES AMARELOS

Coordenado por Conceição Oliveira

2

Perfil

Perfil dos extractos
caracterizados por HPLC-DAD-
HRMS

**Padrões
Sazonais**

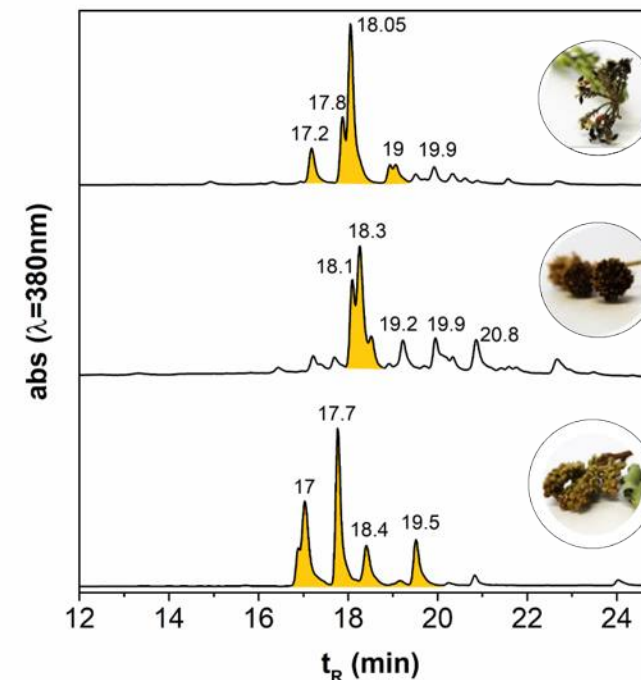
Recolha em diferentes datas e locais

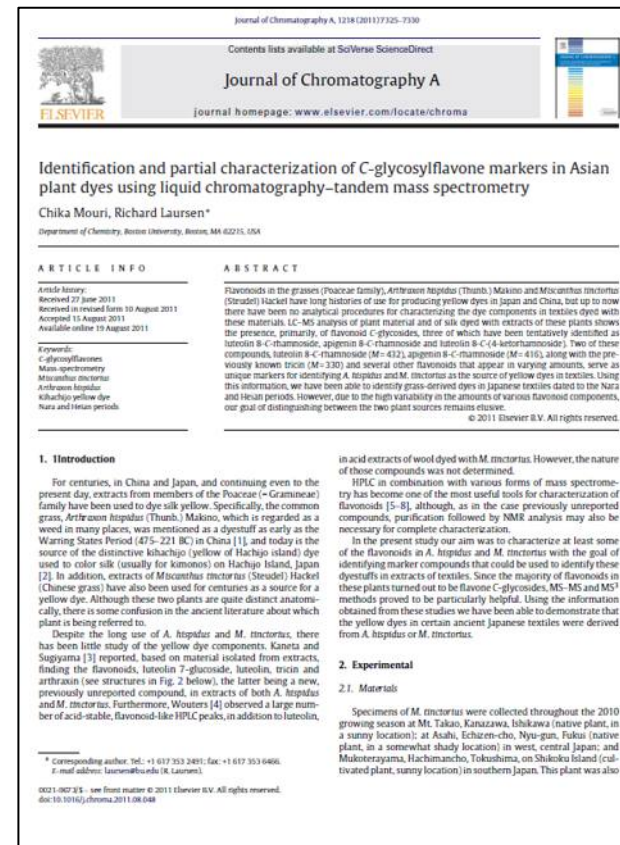
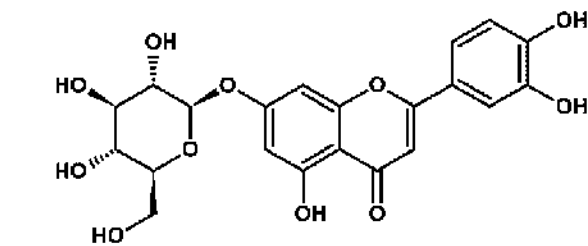
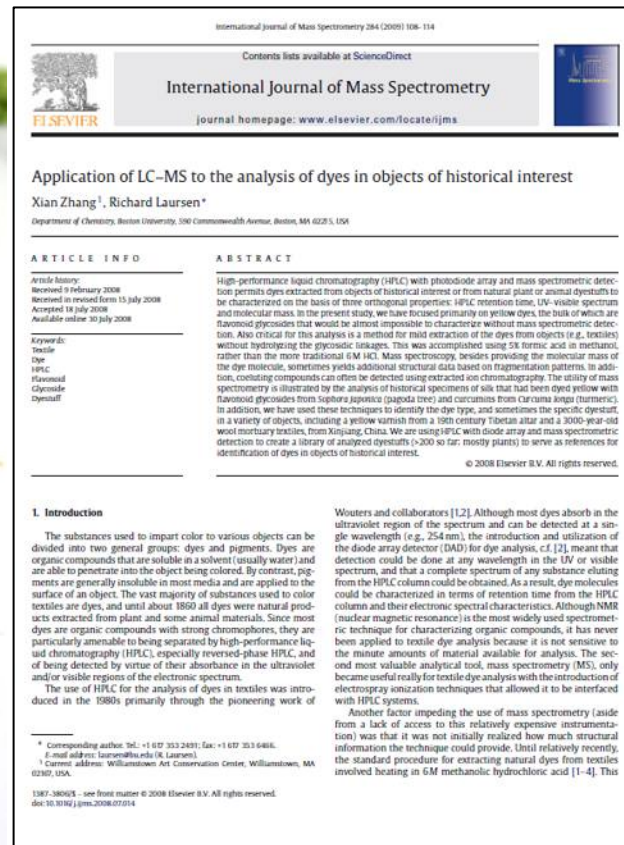
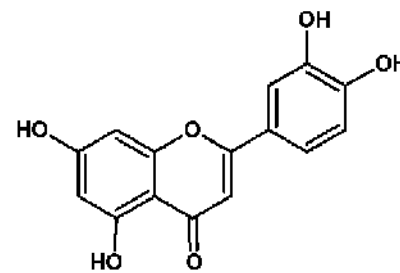
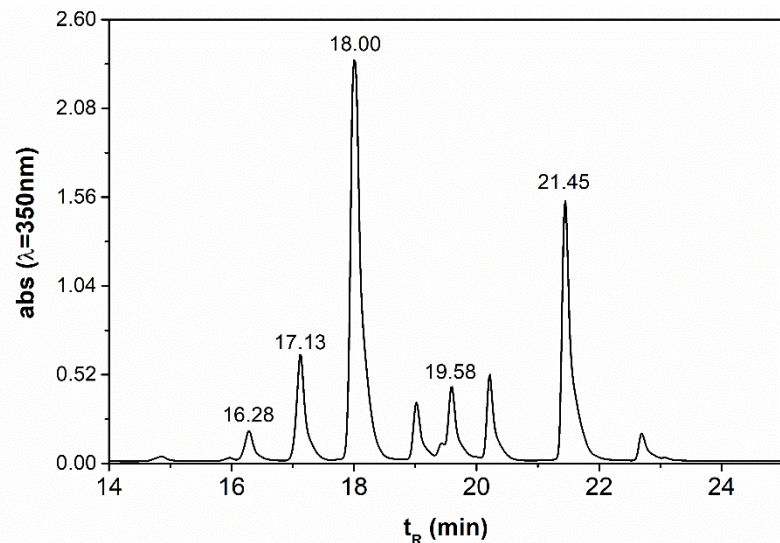
**Base de
Dados**

Distribuição das espécies,
caracterização por HPLC e
outras técnicas, entre outros

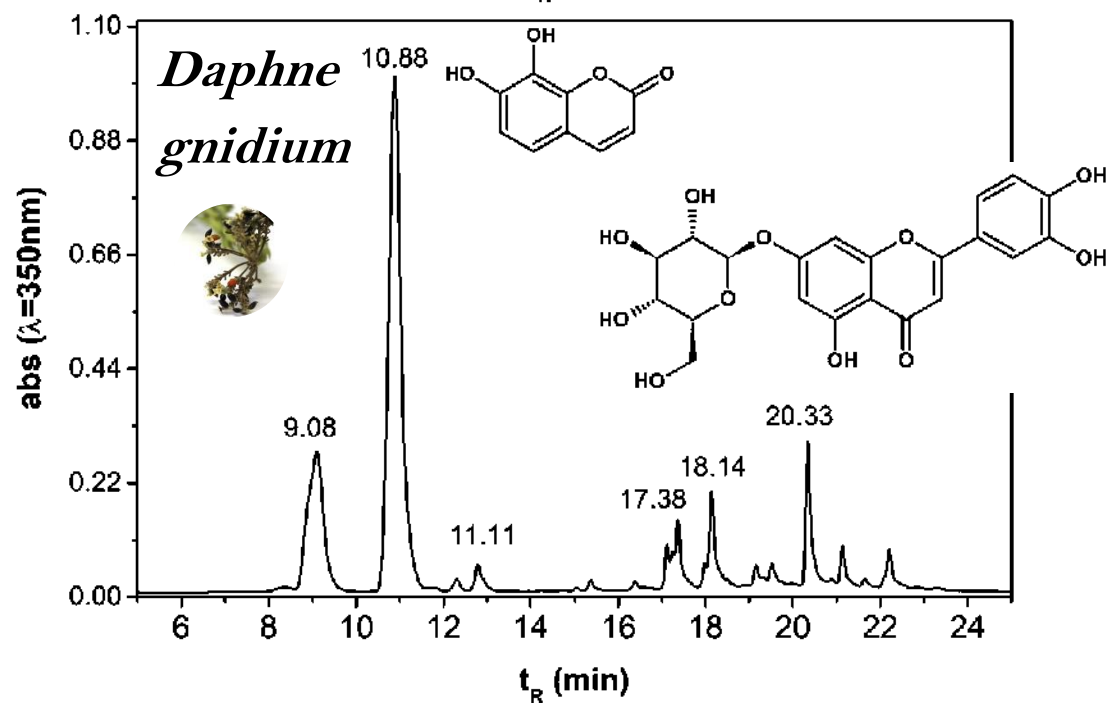
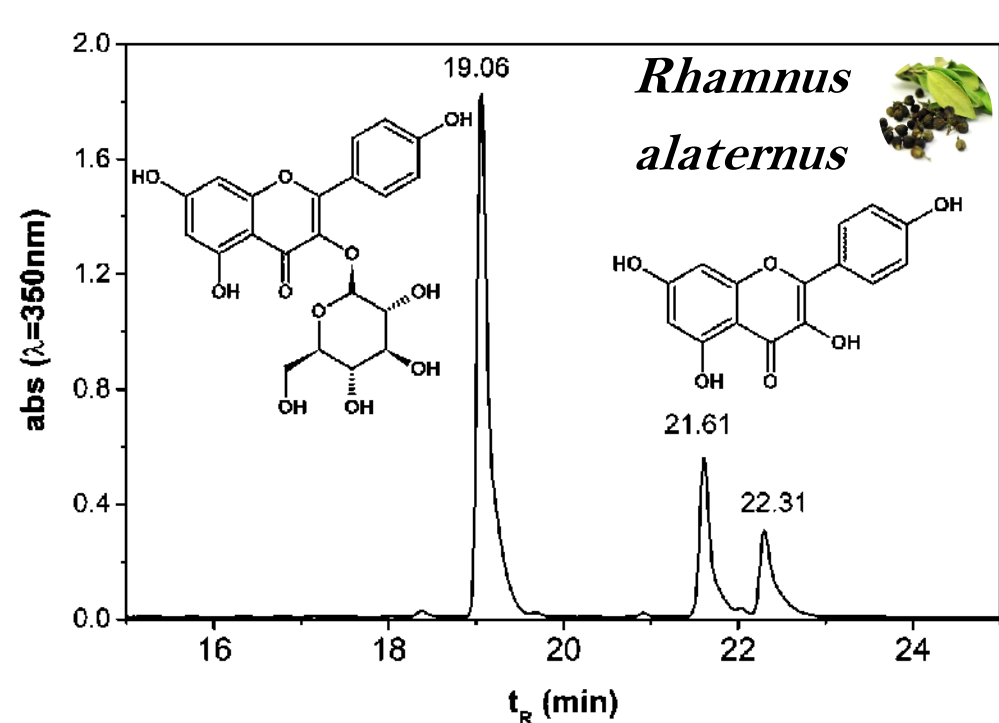
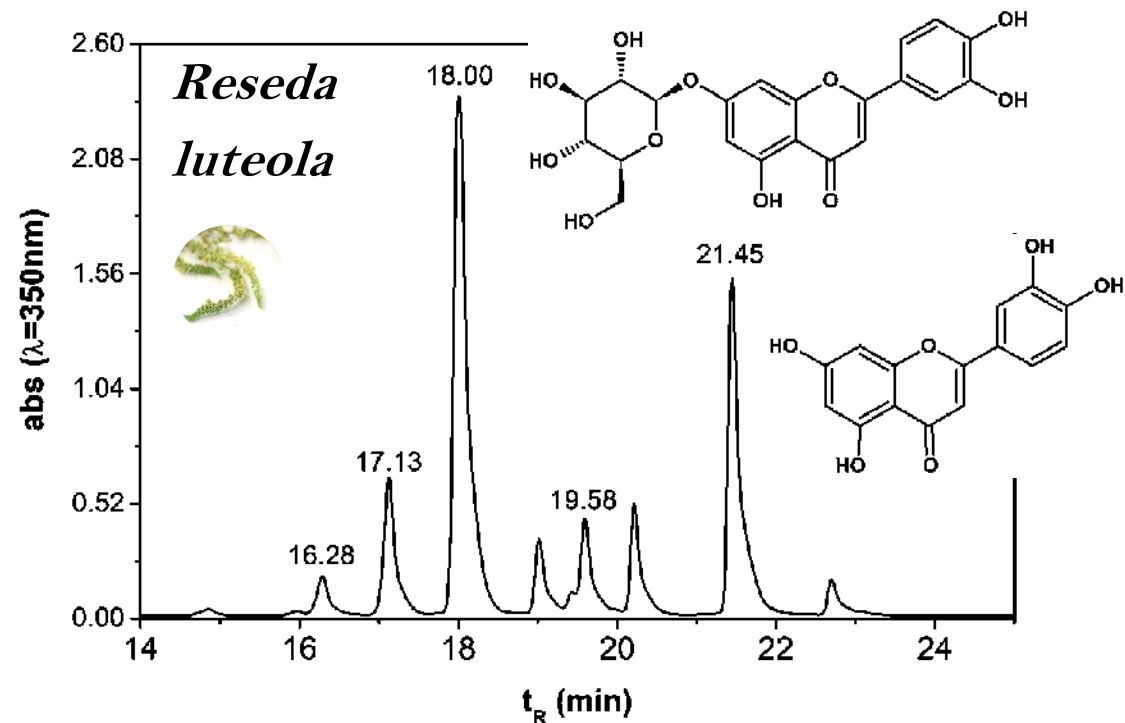


Extracção e caracterização



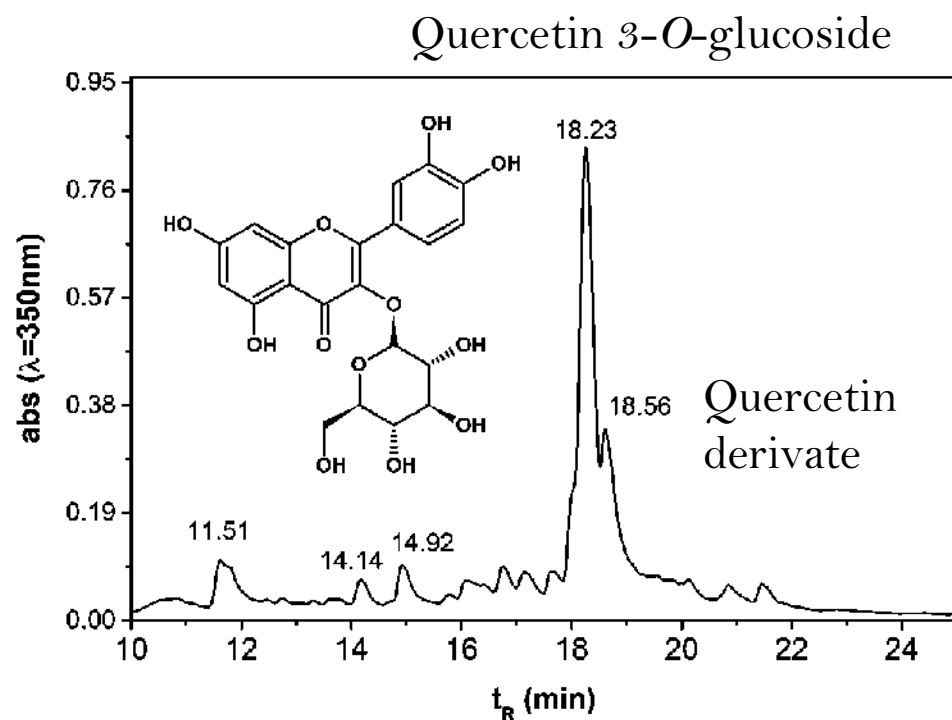
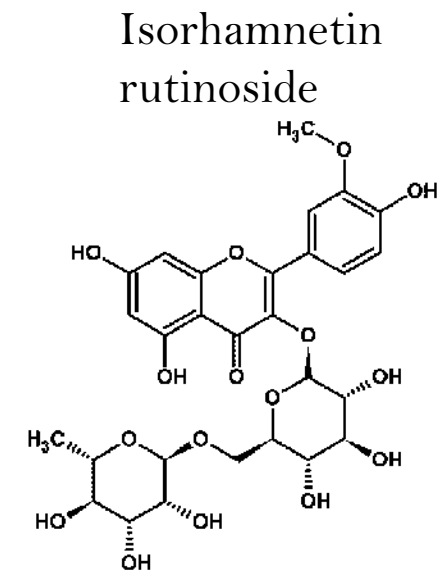
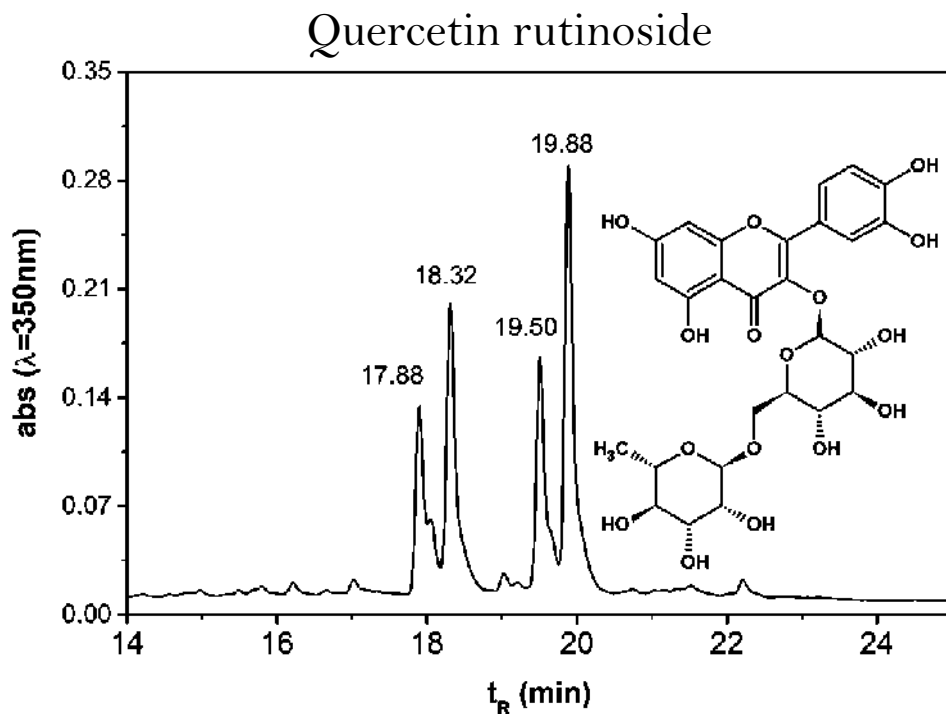


Marques R. *et al.*, Journal of Chromatography A, 2009, 1216:1395–1402; Cuoco G. *et al.*, Microchemical Journal, 2014, 115:130–137; Troalen L.G. *et al.*, Anal. Methods, 2014, 6:8915; Ardalani H. *et al.*, Western Iran, Journal of Herbal Drugs, 2016, 6(4): 195–198; Eser F. *et al.*, The Journal of the Textile Institute, 2017, 108(9):1489–1495; Zhang X & Laursen R, International Journal of Mass Spectrometry, 2009, 284:108–114.

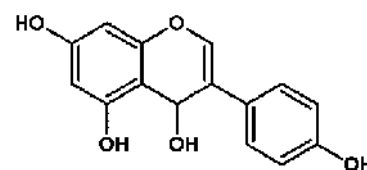




Genista tournefortii

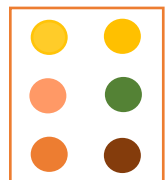


Genista tinctoria
No Genistein!

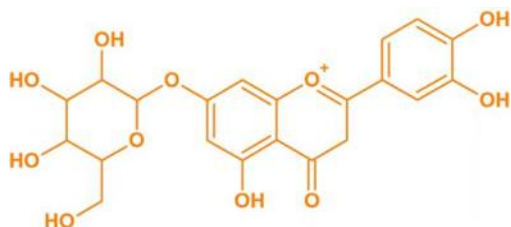


Genista triacanthos

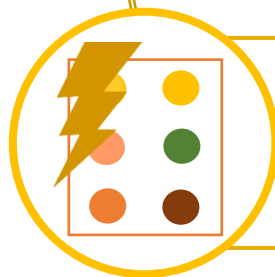
3



Base de Dados



- Têxteis tingidos com a coordenação de D. Cardon
- Testar a saturação das cores das plantas seleccionadas

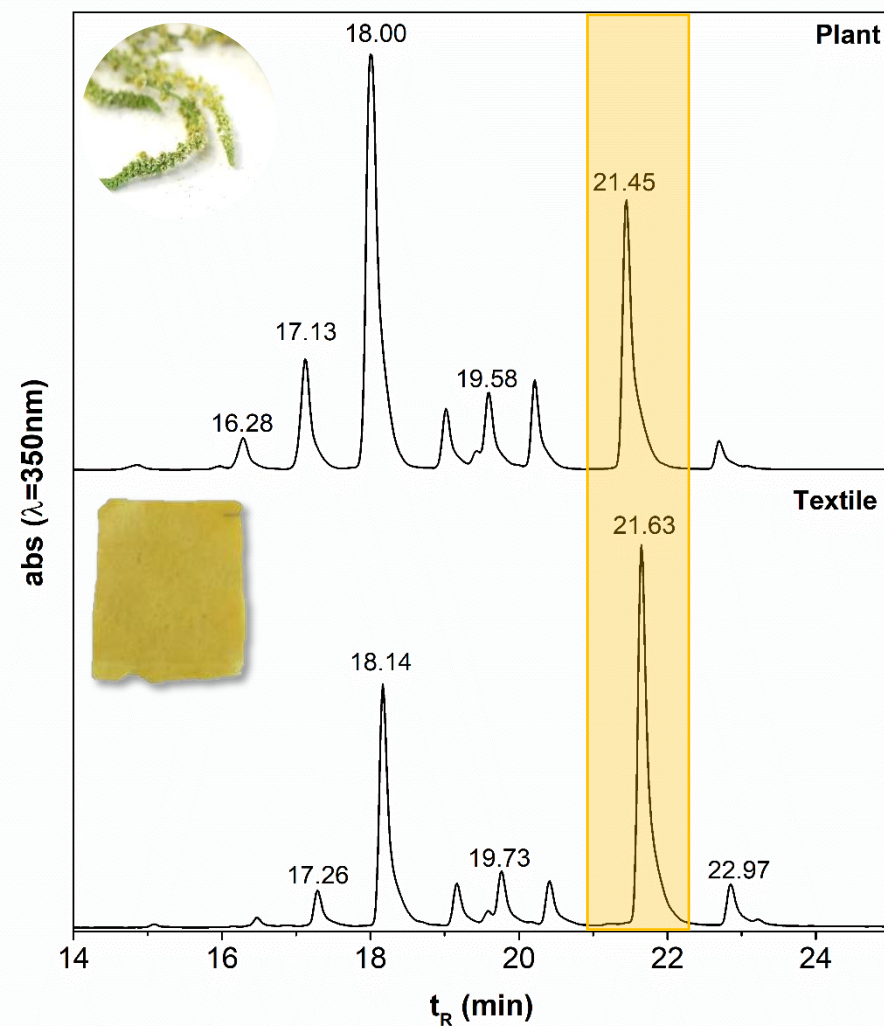
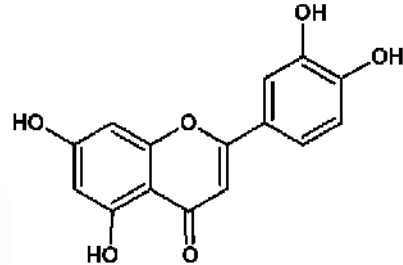


- Têxteis tingidos e tintas preparadas de acordo com receituários e tratados medievais.
- Estudos de fotodegradação

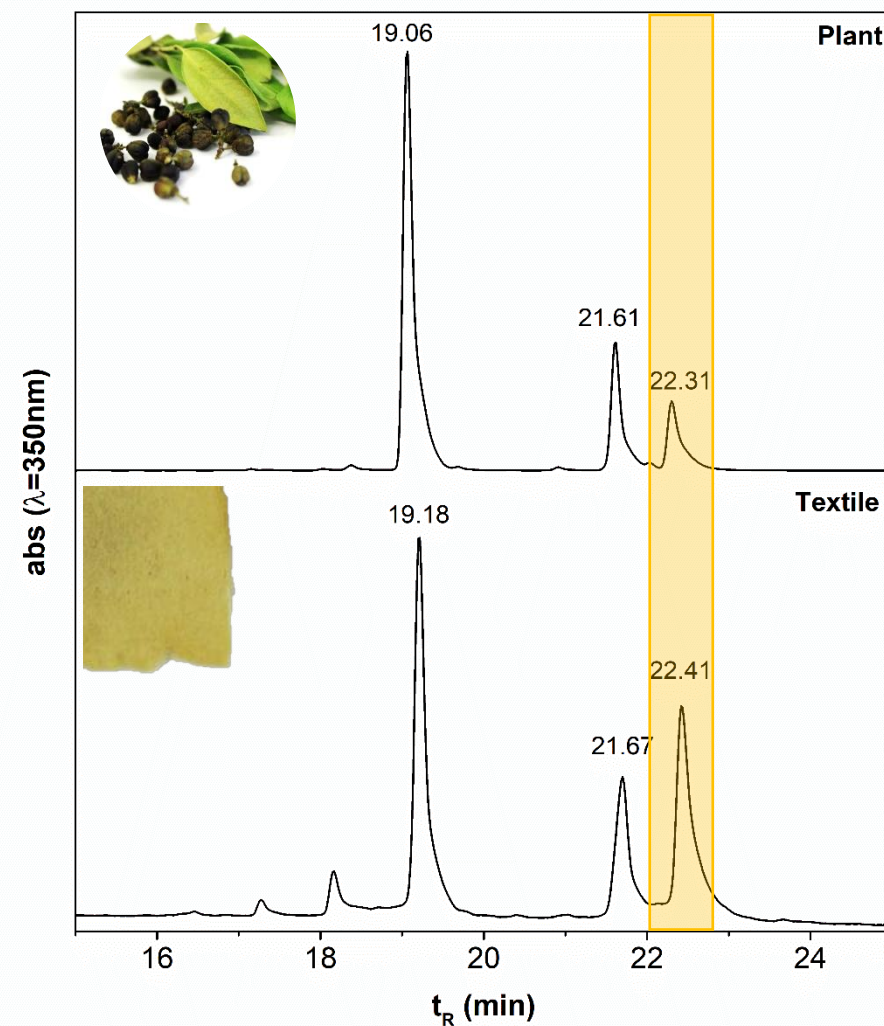
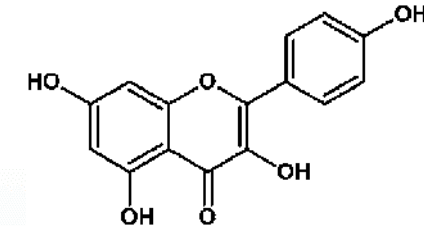


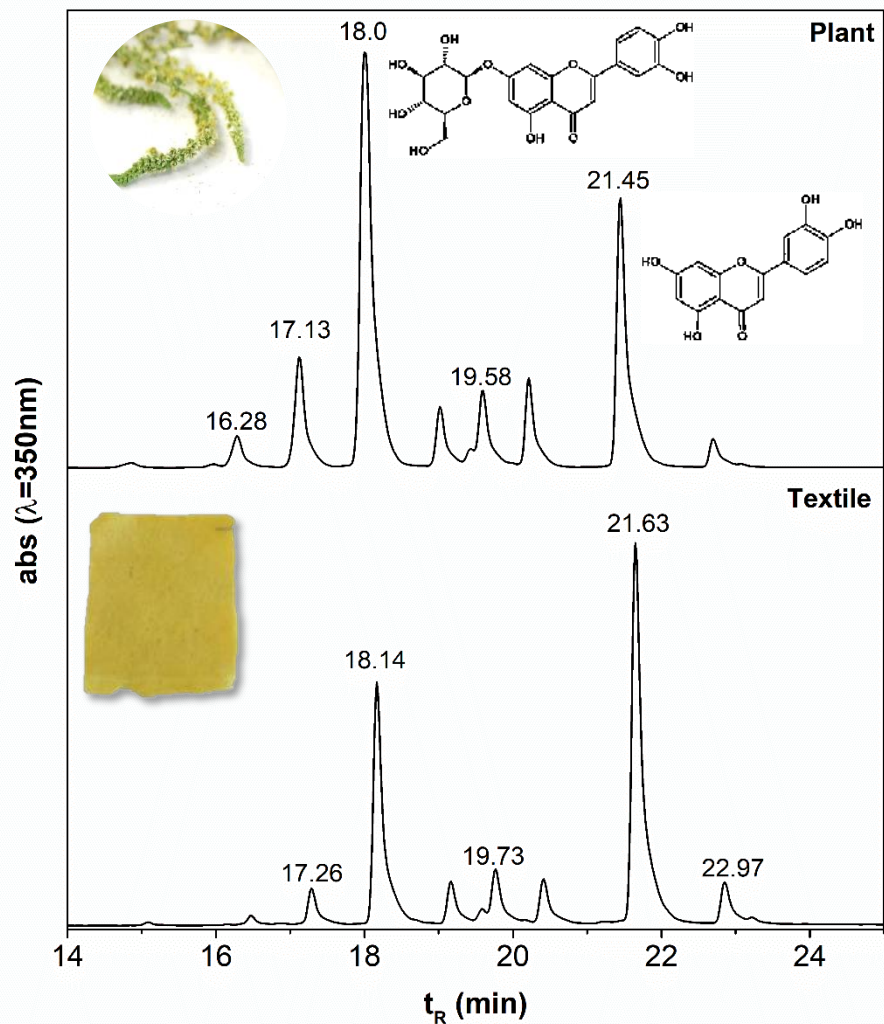
- Caracterização multi-analítica

Reseda luteola



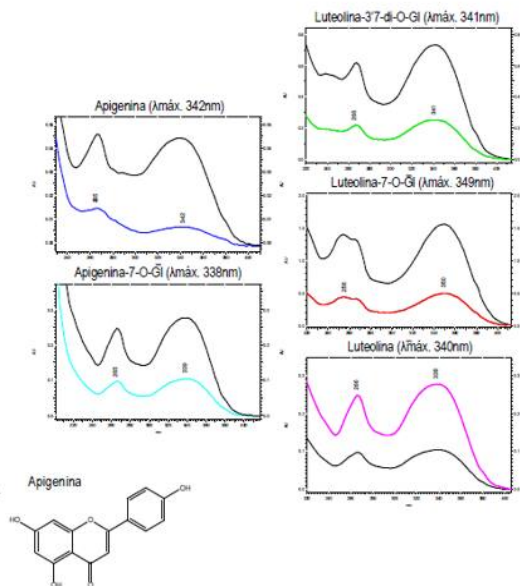
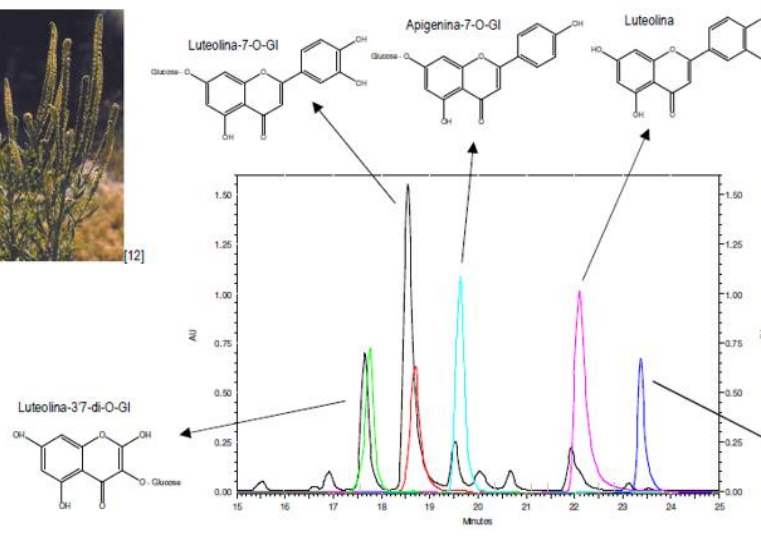
Rhamnus alaternus





Casos de Estudo: *Tapetes de Arraiolos* 17th c.

Lirio-dos-tintureiros
(*Reseda luteola* L.)



Lost Yellows

“Yellow is the warmest and most ardent of colors, like the sun at its zenith, the Golden Light, the path of communication between men and gods. Of divine essence, golden yellow on Earth is characteristic of the powers of princes, kings, and emperors, who thereby proclaim the divine origin of their power.”





PD + F PhD. Course Conservation and Restoration of Cultural Heritage



Acknowledgements

FCT

Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Polifenois em Arte Website: https://sites.fct.unl.pt/polifenois_em_arte/home



PALÁCIO
NACIONAL
DA AJUDA