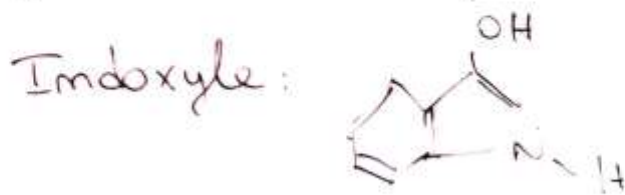
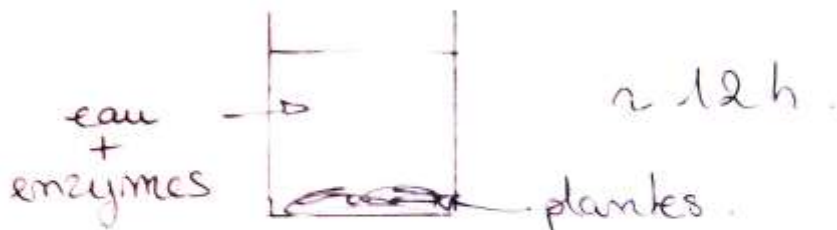
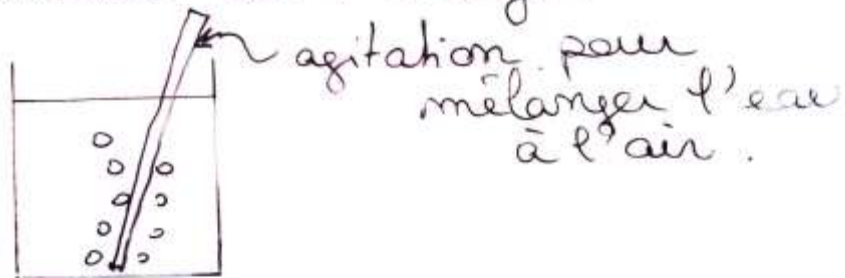


SYNTHÈSE DE L'INDIGO

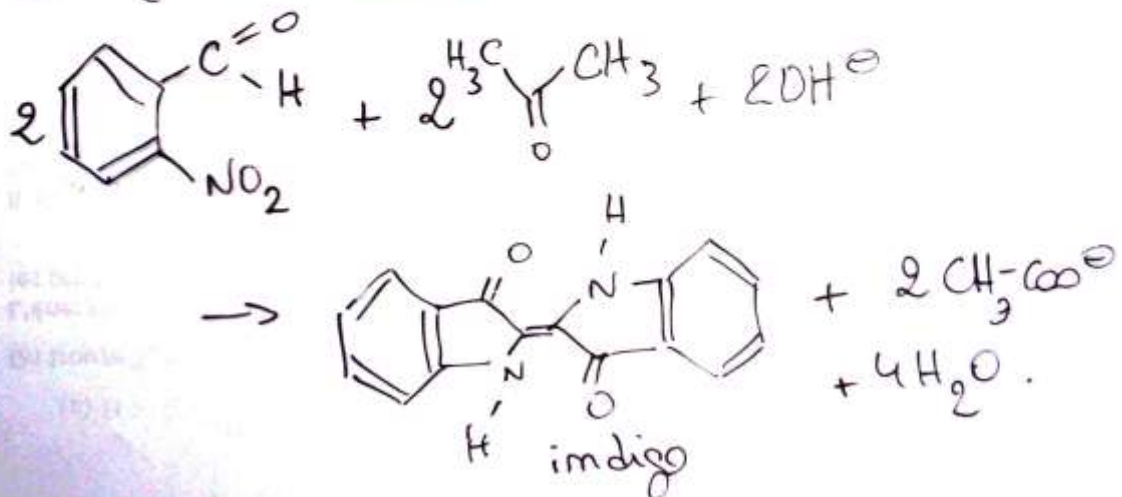
① 1 - formation de l'indoxyle



2 - Formation de l'indigo.

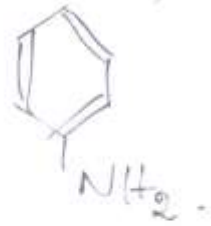


② Synthèse de Baeyer (1882)

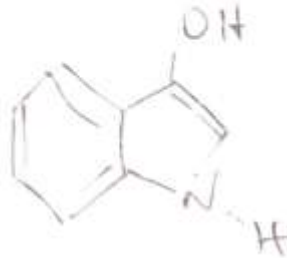


SYNTHÈSE DE L'INDIGO (suite)

③ À partir de l'aniline



Passage par l'indoxyle :



UTILISATION EN TEINTURE

Expérience 5 :

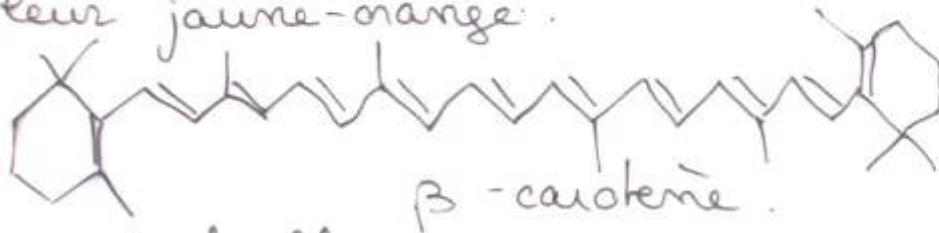
A hand-drawn diagram illustrating the experimental procedure for dyeing with indigo. It shows three test tubes labeled 1, 2, and 3, and a beaker labeled 'mélange ③'.
- Test tube 1: 'indigo + eau'
- Test tube 2: 'indigo + eau + Na₂S₂O₄'
- Test tube 3: 'indigo + eau + soude + Na₂SO₄'
Below the test tubes, a beaker labeled 'mélange ③' is shown with a downward arrow pointing into it. A hatched rectangular piece of fabric, labeled 'bout de tissu', is shown with an upward arrow pointing into the beaker. An arrow points from the beaker to another hatched rectangular piece of fabric, labeled 'séchage à l'air'.

PIGMENTS DANS LES PLANTES VERTES

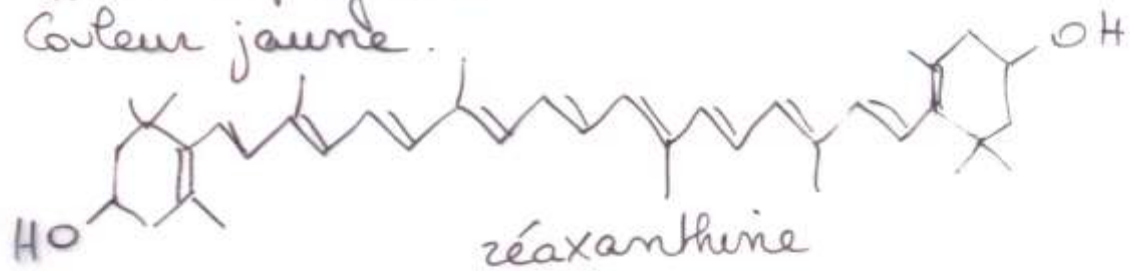
Épimards, oseille, herbe ...

CAROTÉNOÏDES:

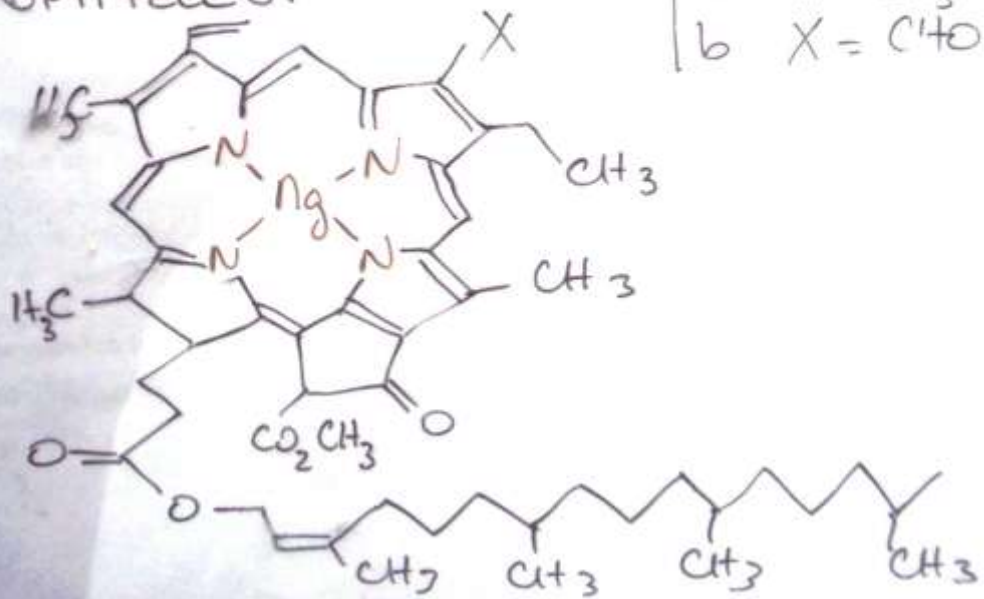
* carotènes = hydrocarbures.
Couleur jaune-orange.



* xanthophylles
Couleur jaune.



CHLOROPHYLLES:

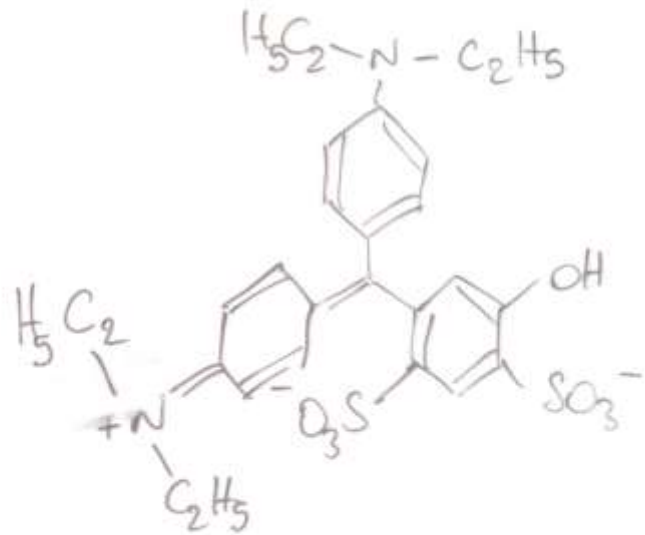


COLORANTS DANS UN SIROP

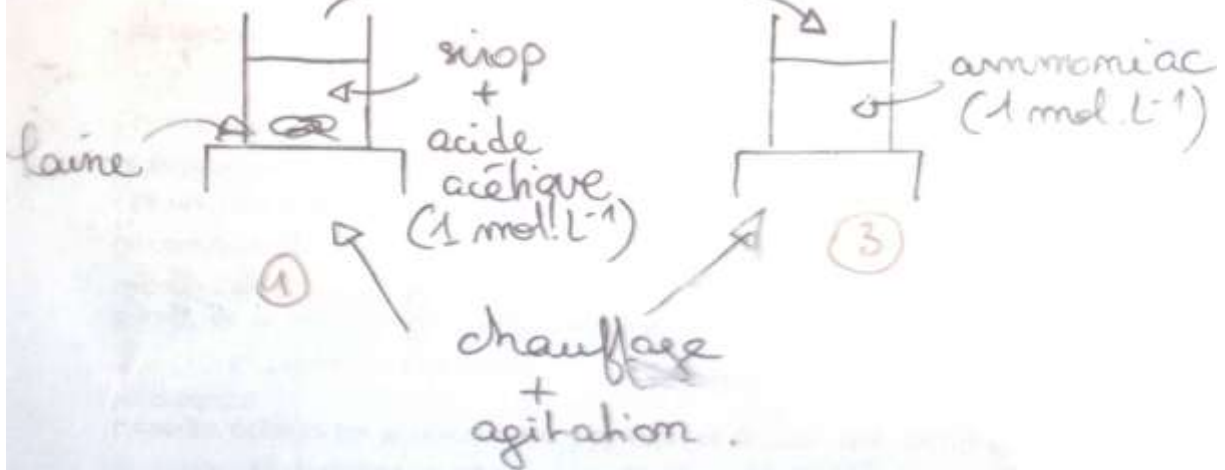
Sur l'étiquette d'un sirop on retrouve

E131

bleu patenté
✓

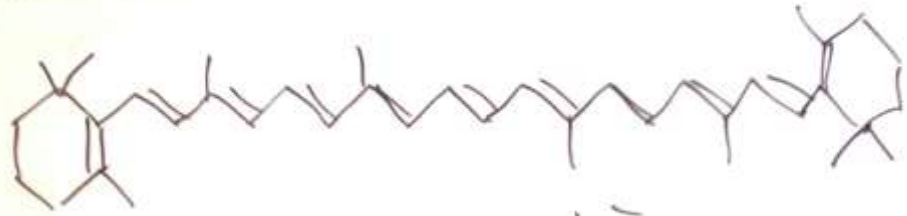


Expérience 3: ~~Quinage~~ à l'eau ②

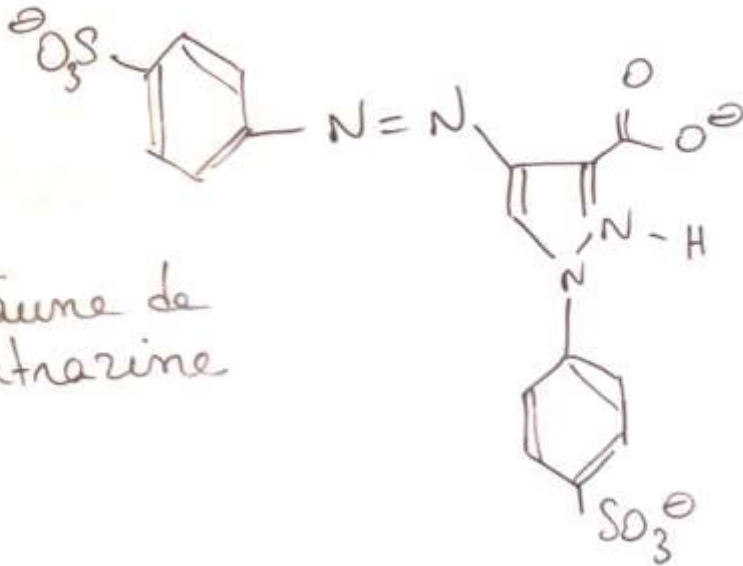


D'où vient la couleur?

* Origine de la couleur:

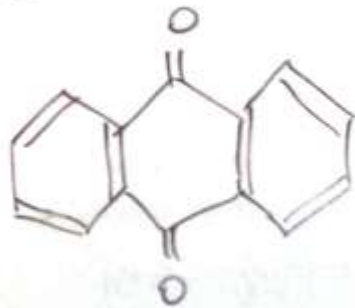


β -carotène

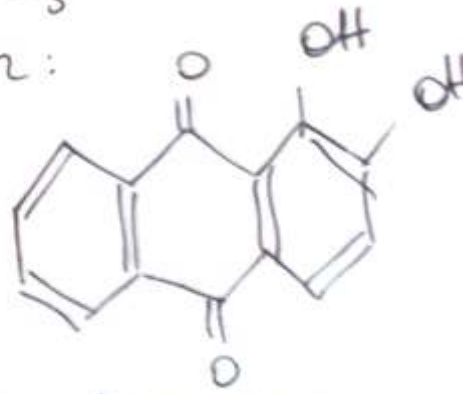


Jaune de
tartrazine

* Domaine d'absorption:



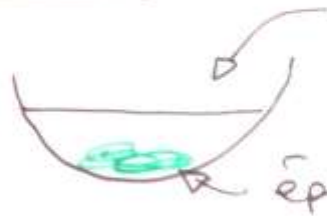
anthraquinone
(jaune)



alizarine
(rouge)

PIGMENTS DES EPINARDS

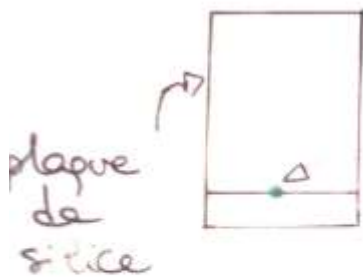
Expérience 1:



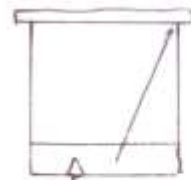
10 ml d'éthanol
+ 30 ml d'éther
de pétrole.

épinards

Expérience 2: Chromatographie sur câche mince

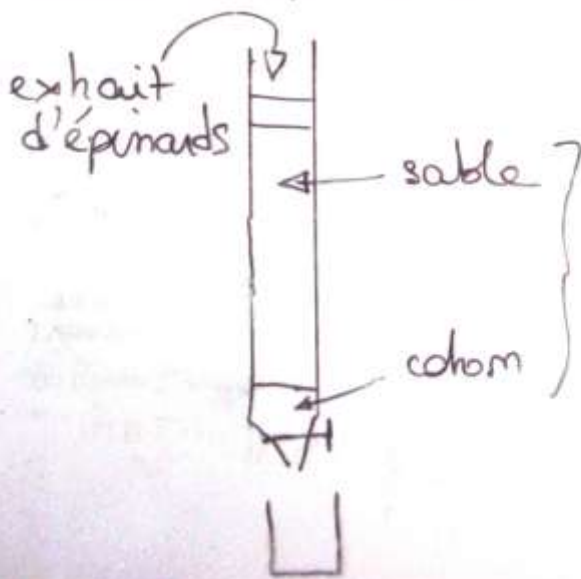


extrait
d'épinards.



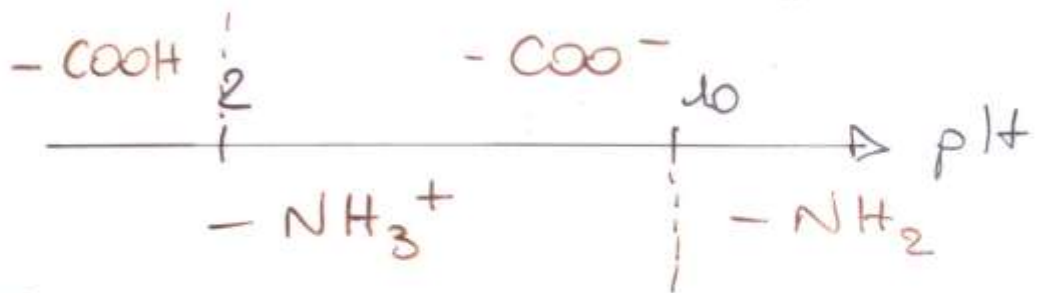
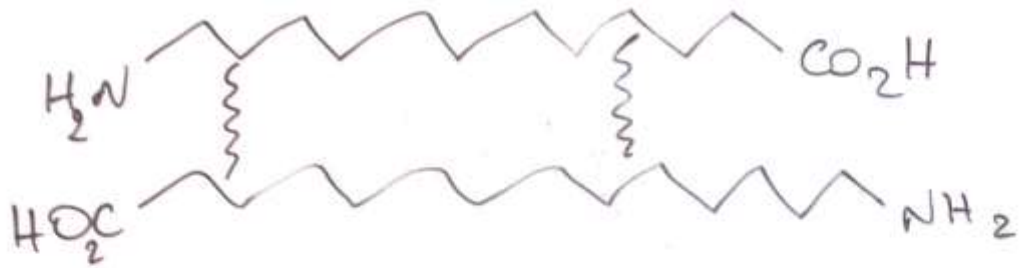
éluant =
40% éther diéthylique
60% éther de pétrole.

Chromatographie sur colonne:

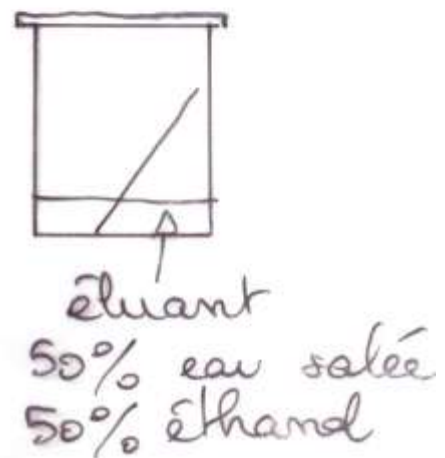
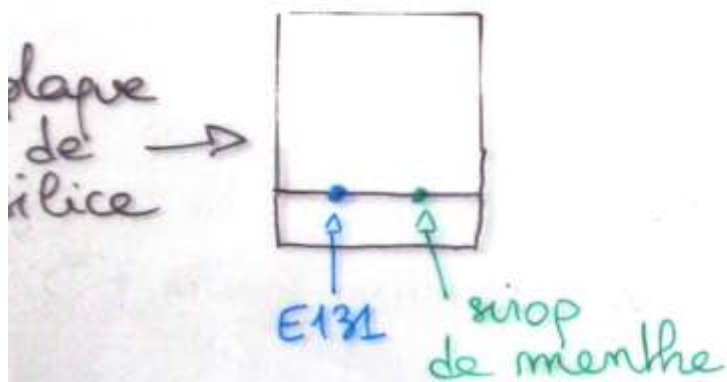


imbibés d'éluant
40% éther diéthylique
60% éther de pétrole.

Laine: kératine



Expérience 4



COLORANTS ALIMENTAIRES

Code	Nom	Origine
E100	Cucurmine	Colorants naturels
E120	Cochénille	
E150	Caramel	
E101	Vitamine B2	Naturels ou synthétiques
E132	Indigoine	
E160	Caroténoïdes	
E161	Xanthophylles	
E102	Tartrazine	colorants synthétiques sans origine naturelle.
E142	Vert acide brillant	
E110	Jaune orangé S.	
E122	Azorange	
E131	Bleu patenté V	
E151	Noir brillant	