

DAB 染色实验报告

一、实验器材及试剂

1、实验器材

名称	厂家	型号
洁净工作台	苏净安泰	SW-CJ-1FD
标本瓶	Wanwu	
解剖镊		
照相机	佳能	70D

2、主要实验试剂

试剂名称	厂家	货号
植物 DAB 染液	Wanwu	G1022
无水乙醇	国药集团化学试剂有限公司	100092683

二、实验步骤

- 1、采集植物的幼苗或根尖，纯水稍洗净，镊子取出植物幼苗或根尖置于滤纸上吸干多余的水分，将植物幼苗或根尖浸入装有 5 mL 植物 DAB 染液 A 的 10mL 圆底 EP 管中，常温避光浸染 2-6h。
- 2、用镊子将植株幼苗或者叶片取出，浸入纯水中来回漂洗 5 次，置于滤纸上吸干多余水分后，浸入 95%乙醇中 40℃处理 3-16 h。
- 3、用镊子取出植株幼苗或者叶片，浸入纯水中来回漂洗 5 次，置于滤纸上吸干多余水分后，拍照。如需保存样本，置于装有 20 mL 植物 DAB 染液 B 的标本瓶中常温保存。

三、结果判读

植物根尖或叶片中产生过氧化氢的部位会呈深棕色，其它呈浅棕色或者无色或者呈植物本身的色素。

DAB staining experimental report

1. Experimental equipment and reagents

1.1 Experimental equipment

Name	Manufacturer	Model
Clean workbench	AIRTECH	SW-CJ-1FD
Specimen bottle	Wanwu	
Anatomy tweezers		
Camera	Canon	70D

1.2 Main experimental reagents

Reagent name	Manufacturer	Article number
DAB dye solution (plant)	Wanwu	G1022
Absolute ethanol	Sinopharm Group Chemical Reagent Co. LTD	100092683

2. Experimental steps

2.1 Collect seedlings or root tips of plants, and wash them with pure water. Then put them on filter paper with tweezers to dry out, and immerse them into a 10mL round-bottom EP tube containing 5mL DAB dye solution A, dipping for 2-6h at normal temperature in the dark.

2.2 Take out the plant seedlings or leaves with tweezers, and immerse them in pure water and rinse 5 times, Then put them on the filter paper to dry out, and soak them into 95% ethanol at 40°C for 3-16h.

2.3 Take out the plant seedlings or leaves with tweezers, and soak them in pure water again and rinse 5 times. Then put them on the filter paper to dry out and take pictures. If you need to save the sample, store the stained sample in a sample bottle containing 20 mL DAB dye solution B at room temperature.

3. The results were as follows

The parts that produce hydrogen peroxide in the root tips or leaves of the plant would be dark brown, while the others were light brown or colorless, or in the color of the plant pigment itself.