Materials List for

Non-Aqueous Isolation and Enrichment of Glandular Capitate Stalked and Sessile Trichomes from *Cannabis* sativa

Shahar Cohen¹, Maxim Itkin¹, Adi Faigenboim¹, Rachel Davidovich-Rikanati², Einat Bar², Daniel Hasson¹, Nurit Shalev³, Hinanit Koltai³, Oded Sagee⁴, Efraim Lewinsohn², Ben Spitzer-Rimon³, Arthur A. Schaffer¹

¹Department of Vegetable Research, ARO-Volcani Center ²Department of Vegetable Research, ARO-Newe Ya'ar Center ³Department of Ornamental Horticulture and Biotechnology, Institute of Plant Sciences, ARO- Volcani Center ⁴Department of Fruit Science, ARO- Volcani Center

Corresponding Author	Citation		
Arthur A. Schaffer	Cohen, S., Itkin, M., Faigenboim, A., Davidovich-Rikanati, R., Bar, E., Hasson, D.,		
vcaris@volcani.agri.gov.il	Shalev, N., Koltai, H., Sagee, O., Lewinsohn, E., Spitzer-Rimon, B., Schaffer, A.A. Non-		
	Aqueous Isolation and Enrichment of Glandular Capitate Stalked and Sessile Trichomes		
	from Cannabis sativa. J. Vis. Exp. (195), e64798, doi:10.3791/64798 (2023).		

Date Published	DOI	URL
	10.3791/64798	jove.com/video/64798

Materials

Name	Company	Catalog Number	Comments
Bioanalyzer RNA Pico 6000 chip	Agilent, Germany	Reorder number 5067-1513	Lab-on-a-chip system
Transsonic-310	Elma, Germany	D-78224	Ultrasonic cleaning unit
TruSeq RNA Sample Prep Kit v2	Illumina, USA	RS-122-2001	Sample preperation for RNA sequencing library
Spectrum Plant Total RNA Kit	SIGMA-ALDRICH, USA	STRN50-1KT	Plant Total RNA Kit
Nylon micro-sieve with a mesh size of 350 μ m (40 x 40 cm or larger than the circumference of the flour sifter)	Sinun Tech, Israel	r0350n350210	Nylon screen aperture
Nylon micro-sieve with mesh size of 150 µm (size of 30 x 30 cm)	Sinun Tech, Israel	r0150n360465	Nylon screen aperture
Nylon micro-sieve with mesh size o 105 μm (size of 30 x 30 cm)	Sinun Tech, Israel	r0105n320718	Nylon screen aperture
Nylon micro-sieve with mesh size o 80 μm (size of 30 x 30 cm)	Sinun Tech, Israel	r0080n370465	Nylon screen aperture
Nylon micro-sieve with mesh size o 65 µm (size of 30 x 30 cm)	Sinun Tech, Israel	r0065n340715	Nylon screen aperture
Nylon micro-sieve with mesh size o 50 µm (size of 30 x 30 cm)	Sinun Tech, Israel	r0080n370465	Nylon screen aperture
Up to 10 g of frozen plant material			
(stored in -80 ^o C or liquid nitrogen)			
Suitable gloves for handling low temperatures			
Safety goggles			
1 mm screen door (mosquito) mesh (strip of 30 x 100 cm)			

Large strainer (colander) with holes approximately 5 mm		
1 L glass beaker		
1 block of dry ice (0.5-1 kg)		
Hammer and hard flat object		
Two 5 L plastic containers		
Rubber bands		
Large flour sifter or sieve strainer- preferably one with a detachable plastic ring on the circumference		
Several large and small round bottom stainless steel containers. One of them should be larger than the flour sifter's circumference (approximately 40 cm in diameter), to minimize the loss of the sifted mass outside the round bottome stainless steel container		
Pre-chilled (via liquid nitrogen) stainless steel spoon, spatula, and scoopula		
Clean plate		
Several clothespins		
Pre-chilled (via liquid nitrogen) labeled 1.5 mL tubes with holes poked on the lid with a sterile needle		
Two containers of liquid nitrogen		
1 cm wide painting brush		