

LIP Advisory Committee 2025

23 – 24 April 2025 - LIP - Lisboa



Discussion with research groups: Science & Society

Radiation, Health and Environment



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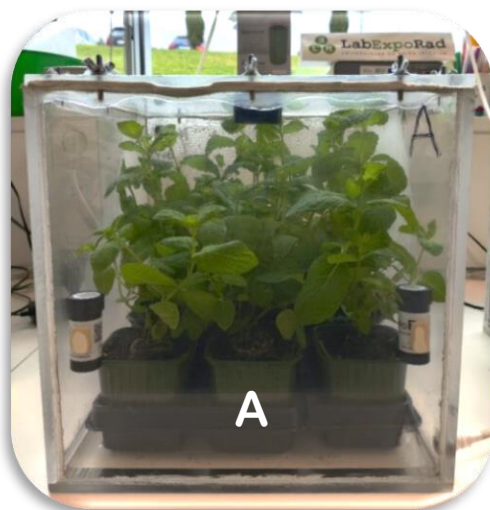
Thursday, 24 April



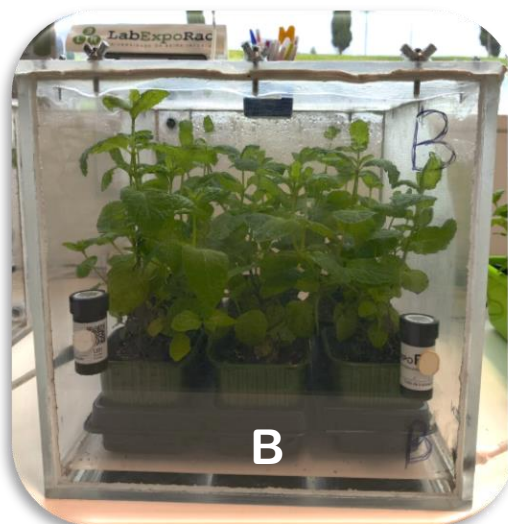
Experimental Study on the Effects of Radon-Containing Aerosols on *Mentha spicata* L.



HPLC/DAD (21 compounds identified)



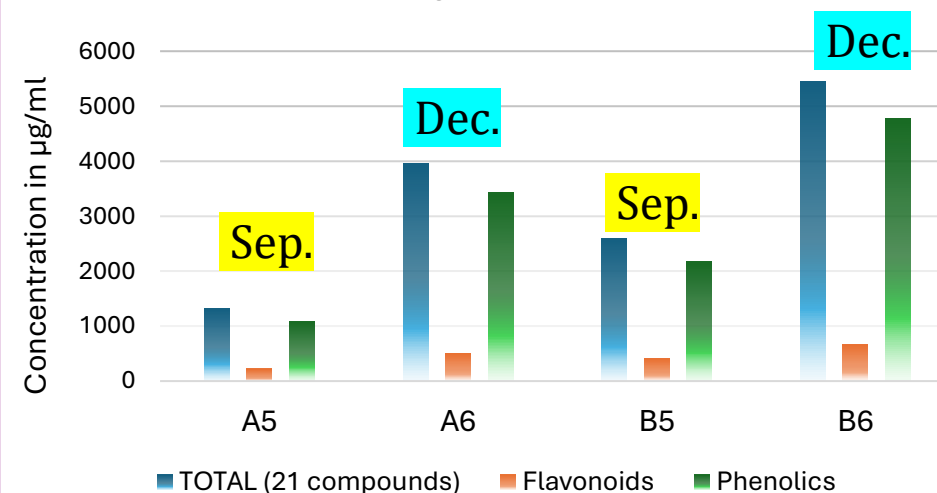
Radioactive Rocks



no rocks

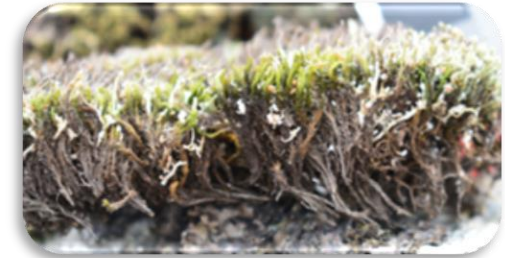
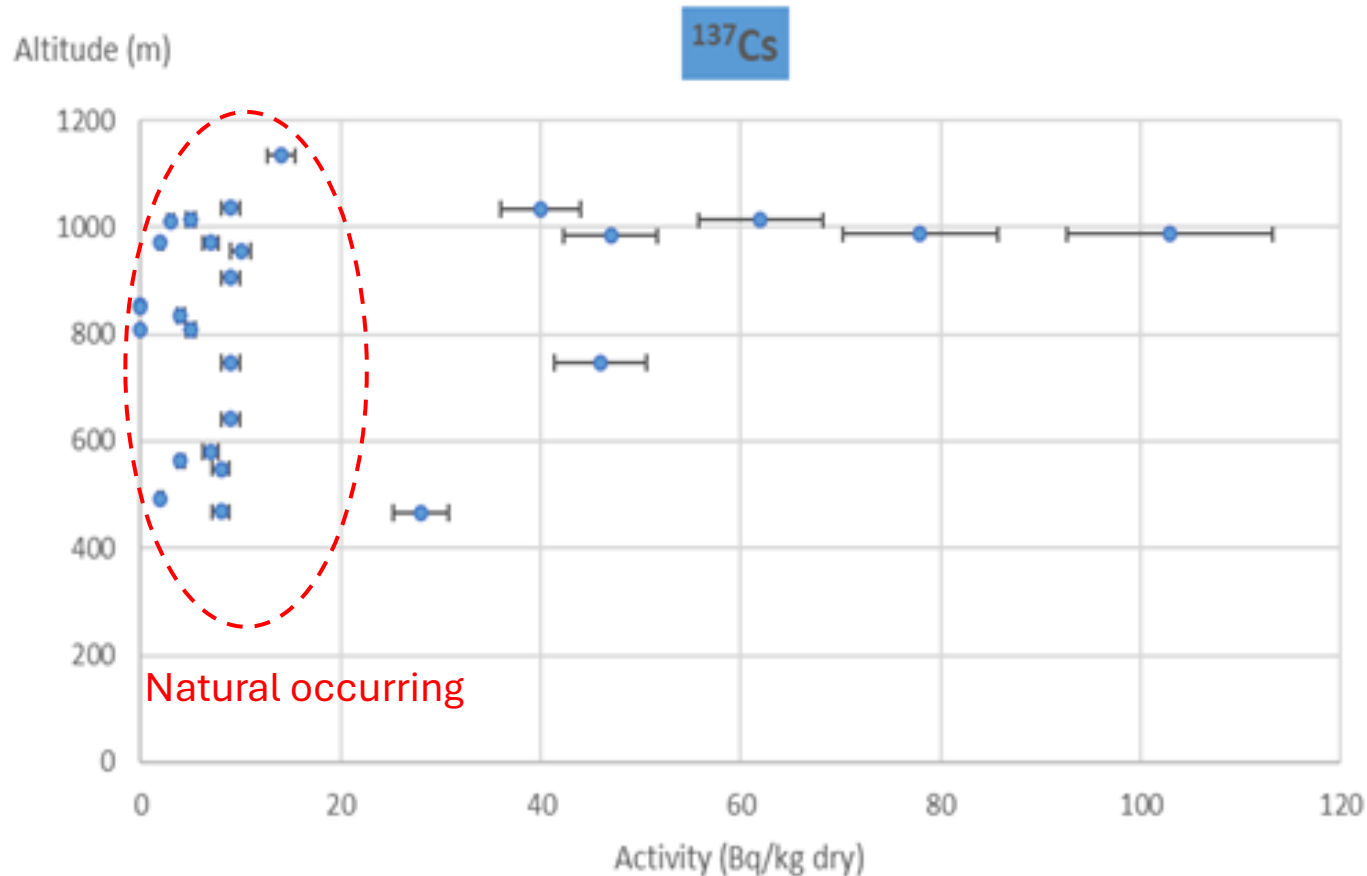
Group	Specific activity (kBq · m ⁻³)
A5 – Sep.	52 ± 10
A6 – Dec.	82 ± 16
B5 – Sep.	0.18 ± 0.09
B6 – Dec.	0.62 ± 0.12

COMPARATIVE ANALYSIS OF RESULTS FROM HPLC/DAD



Significant increase in antioxidant compounds in radon-exposed plants.

Environmental Behavior of Natural and Anthropogenic Radionuclides in Beira Interior – Preliminary Observations from Soil and Moss



Gamma emission	
Radioisotope	Energy (keV)
^{214}Pb	351,9
^{208}Tl	583,2
^{214}Bi	609,3
^{137}Cs	661,7
^{228}Ac	911,2
^{40}K	1460

Sampling in 3 different regions

Belgium: Hautes Fagnes, East, between 150 and 650 m altitude

Switzerland : Valais , between 1400 and 2200 m altitude

Portugal : Centre of the country, Serra da Estrela, between 400 and 1500m altitude

	¹³⁷ Cs	
	A (Bq/kg)	
	Mean value	1σ
Portugal	19.3	20
Belgium	1.1	0.5
Switzerland	3.9	1.7

Specific activity in Cs-137 higher in mosses from central Portugal than from Belgium or Switzerland