

Bioactive compounds profiling and nutritional composition of three species from the Amaranthaceae family

B. Nuñez-Estevez^{1,2}, T. C. Finimundy², M. Carpena¹, M. Barral-Martinez¹, R. Calhelha², T. C. S. P. Pires², Paz Otero¹, P. Garcia-Perez¹, J. Simal-Gandara¹, I.C.F.R. Ferreira², M.A. Prieto^{1,2,*}, and L. Barros^{2,*}

1 Nutrition and Bromatology Group, Faculty of Food Science and Technology, University of Vigo, Ourense Campus, E32004 Ourense, Spain

2 Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal

Correspondence: *mprieto@uvigo.es; *lillian@ipb.pt

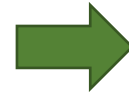
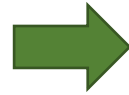
Introduction

A
M
A
R
A
N
T
H
A
C
E
A
E

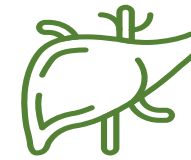
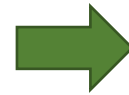
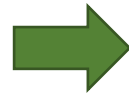
F
A
M
I
L
Y



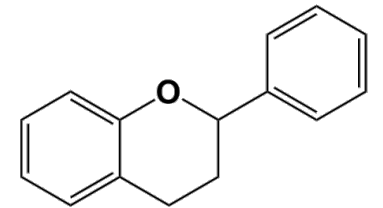
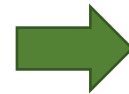
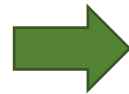
Alternanthera sessilis



Dicliptera chinensis

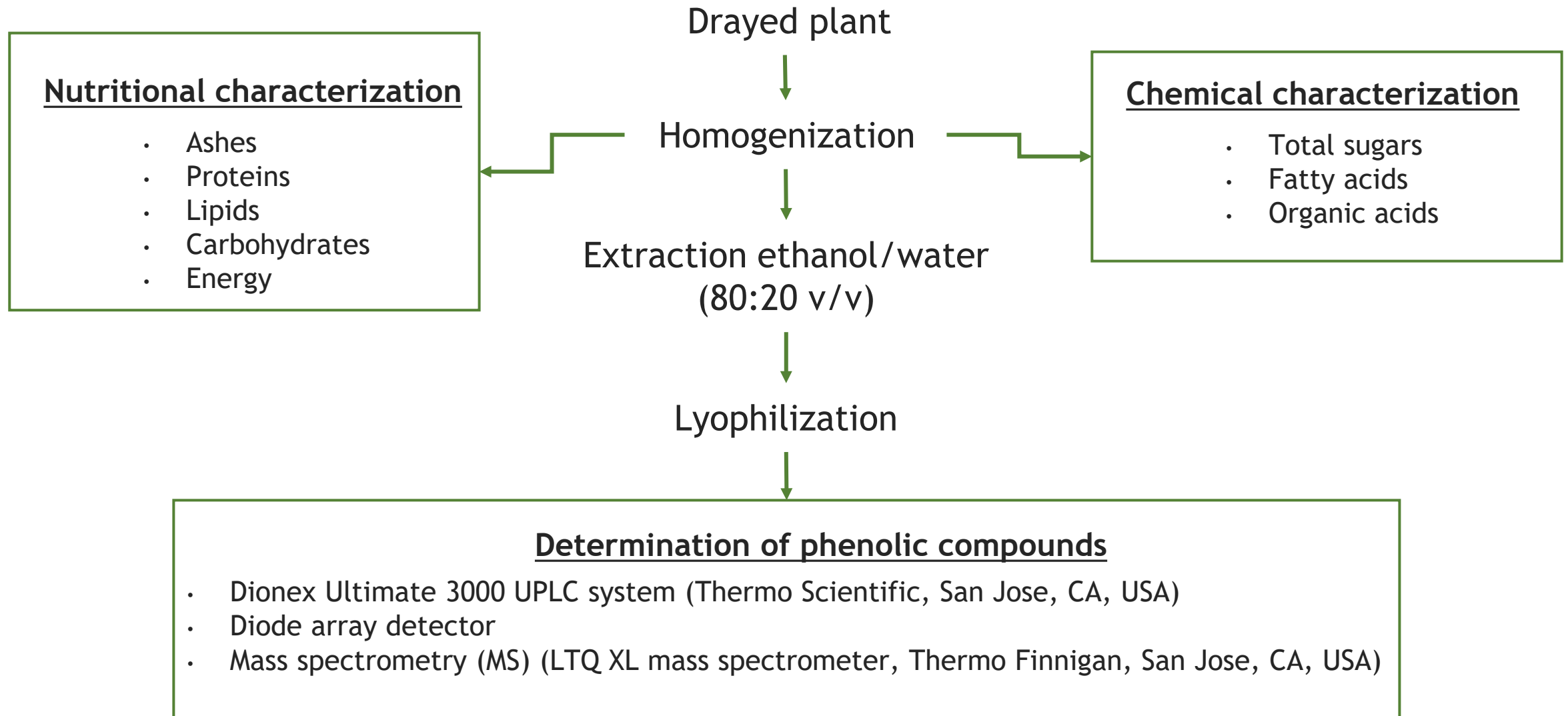


Dysphania ambrosioides



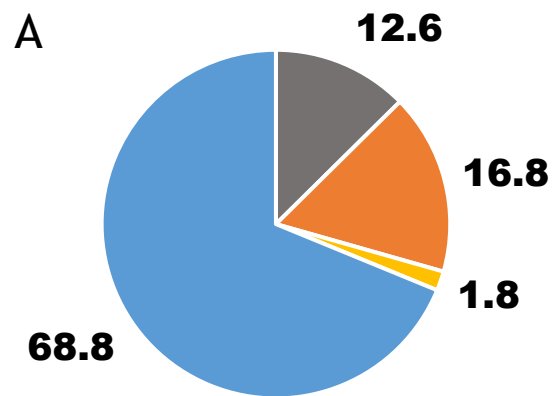
Bioactive compounds

Material and Methods



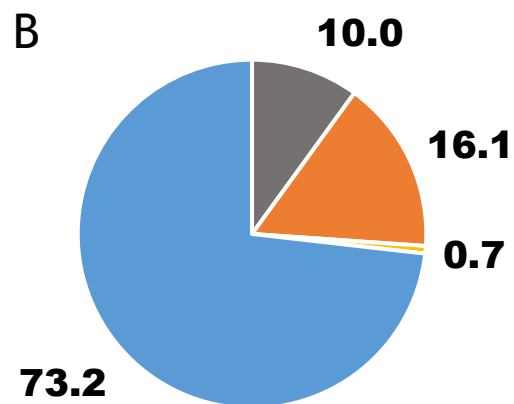
Results

Nutritional characterization



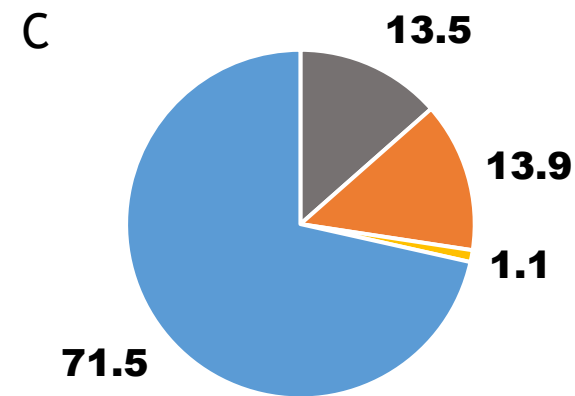
Energy
363.7 ± 0.3 kcal/100 g dw

A. sessilis



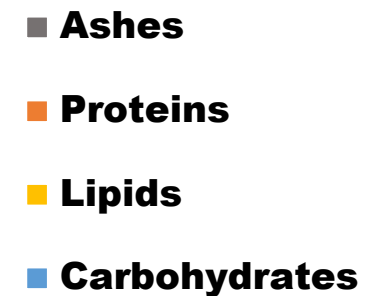
Energy
358.8 ± 5.3 kcal/100 g dw

D. chinensis



Energy
351.5 ± 2.1 kcal/100 g dw

D. ambrosioides



Ashes	<i>D. ambrosioides</i> <i>D. chinensis</i> <i>A. sessilis</i>		Other genders of Amaranthaceae (<i>Amaranthum</i>)
--------------	---	--	--

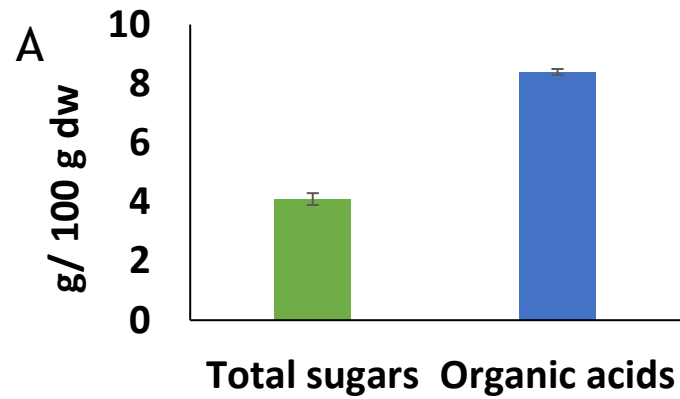
Proteins	<i>A. sessilis</i> <i>D. chinensis</i>		<i>Chenopodium</i> <i>quinoa</i> (quinoa)
-----------------	---	--	--

Lipids	<i>D. ambrosioides</i> <i>D. chinensis</i>		
---------------	---	--	--

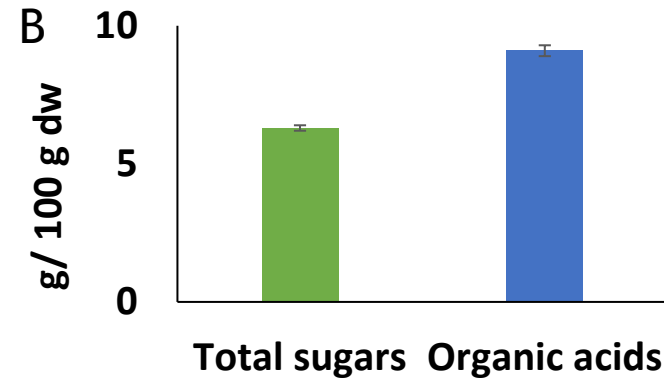
Carbohydrates	<i>D. ambrosioides</i> <i>D. chinensis</i> <i>A. sessilis</i>		
----------------------	---	--	--

Results

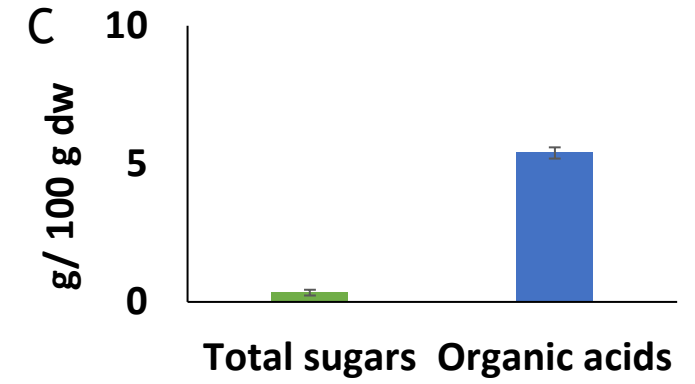
Chemical characterization



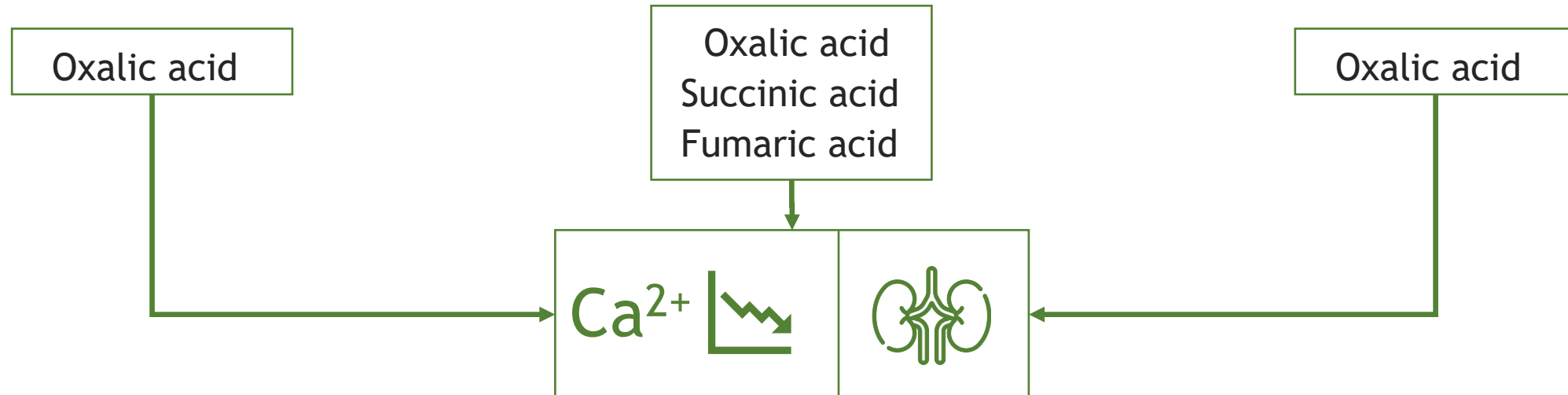
A. sessilis

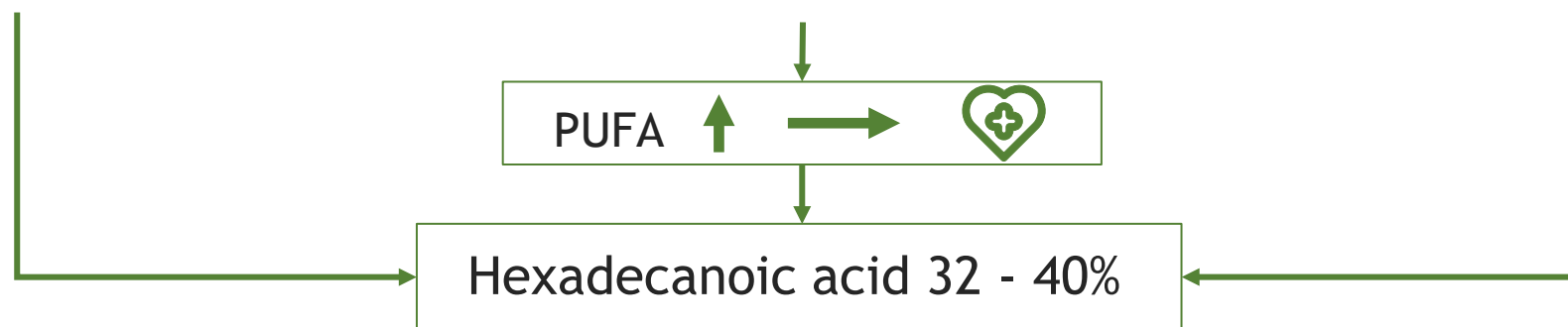
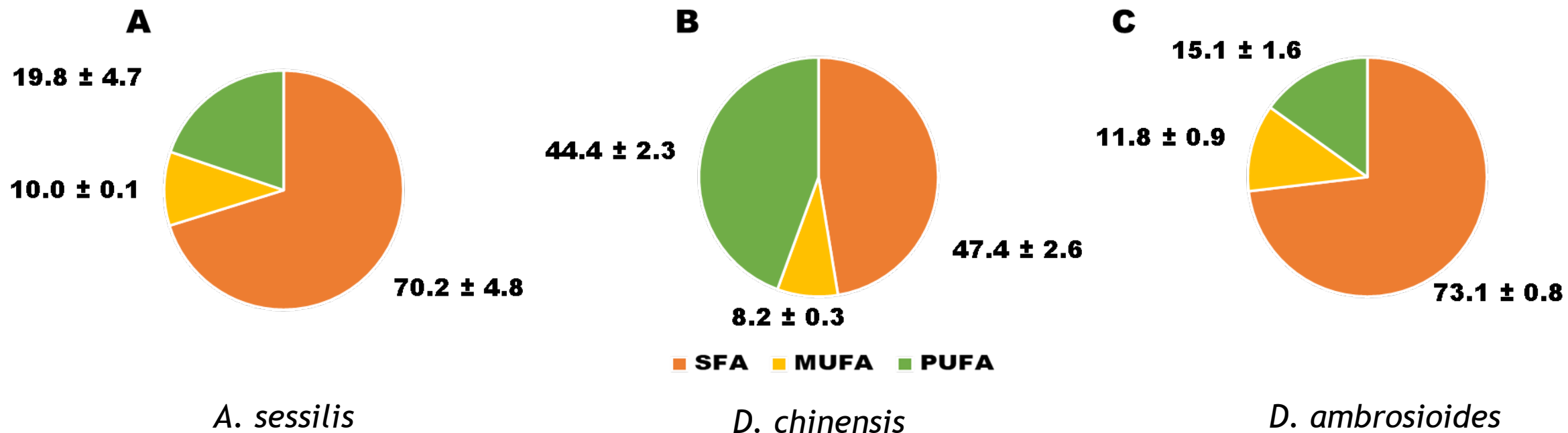


D. chinensis



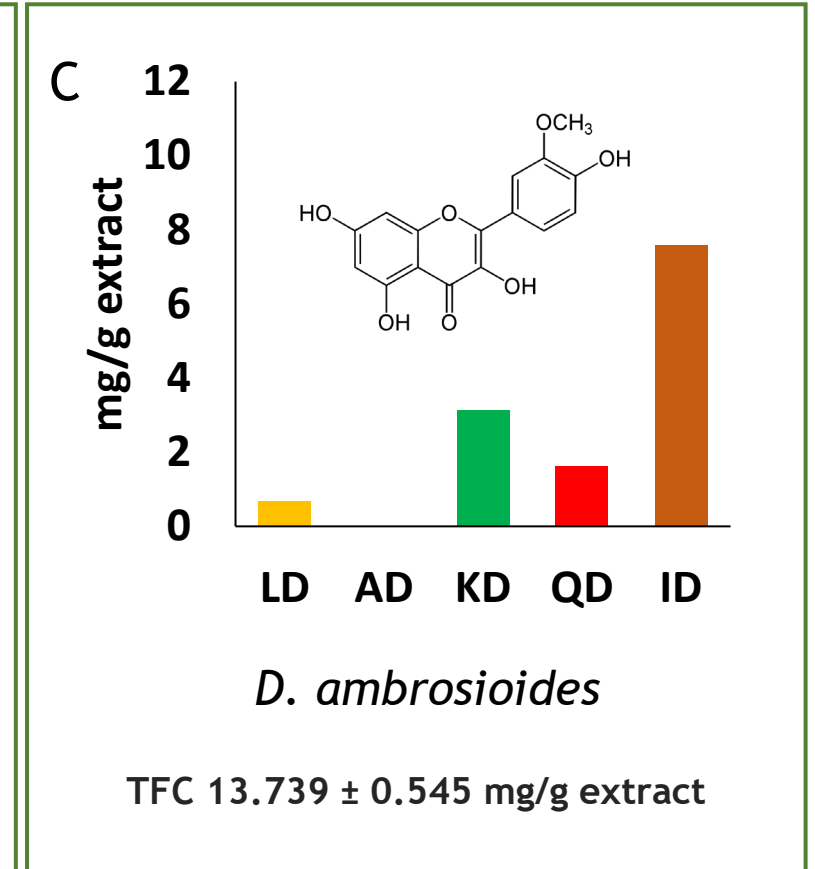
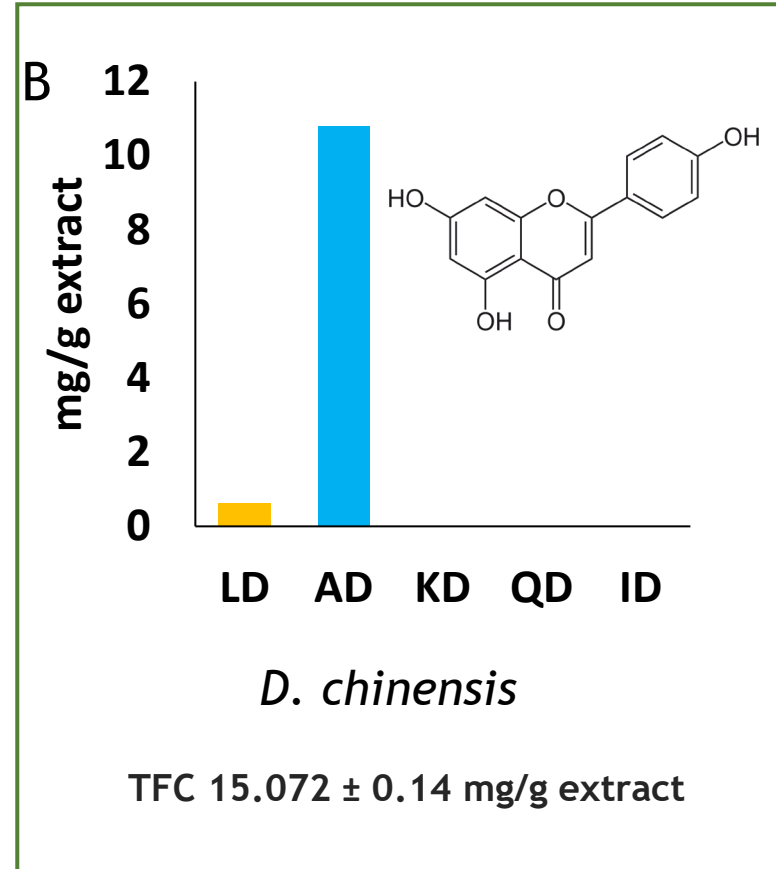
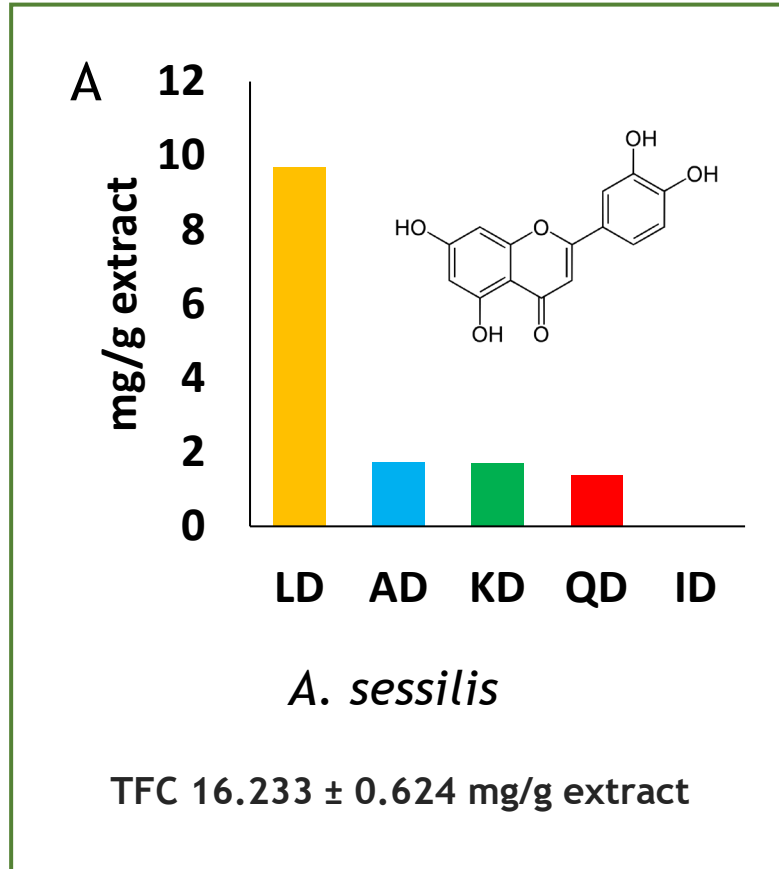
D. ambrosioides





Results

Phenolic compounds



BIOACTIVITIES

Conclusions

