

The Relative Commercial Potential *Capsella bursa-pastoris* L. Medic (Shepherd's Purse) Ecotypes As Fresh And Processed Products



Meredith Johnston¹, Fiona Lamotte², and Pietro Iannetta^{3,*}

¹Blairgowrie High School, ² Managing Director, ScotHerbs Ltd, ^{3,*} Molecular Ecologist, SCRI

Introduction

The common weed *Capsella* has long been recognised for its medicinal potential

However, it is not used widely in so-called 'developed' Western market places

There are many within-species variants of *Capsella* (ecotypes)

We assessed the differences in growth and taste between six different leaf shape forms

Germination and growth

The seeds were sown into compost filled pots,

Three pots per were placed in a NFT system (see poster Hale et al.)

Leaf Size at maturity

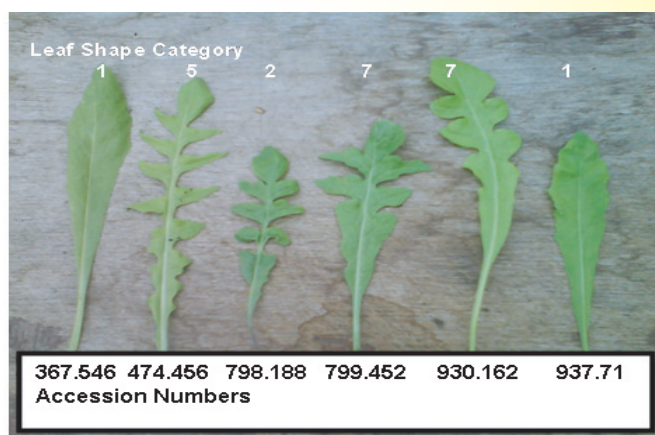
The most productive ecotypes should be selected

Rosette diameter, leaf numbers and biomass were measured

Ecotype	Rosette Diameter (cm)	Leaf Number	Total Biomass (g)
367.546	30.4	16.4	6.65
474.456	29.9	23	7.21
798.188	24.49	16.55	2.94
799.452	35.2	19.5	8.83
930.162	31.61	34.2	6.5
937.71	27	18	4.95

Leaf Shape at maturity (pre flowering)

ature leaves of each ecotype were assessed (see figure below)



Taste as a salad and a soup

Scores are out of 10 - high numbers = good flavour

Ecotype	Pleasant	Taste	Texture	Appearance /10	Overall
367.546	Yes	Bland/bitter	Rough	3	2
474.456	Yes	Mild/bitter	Rough	5	3
798.188	Yes	Sweet	Very hairy	8	4
799.452	Yes	Sweet	Fine hairs/ smooth	7	9
930.162	Yes	Bitter	Slightly hairy	8	5
937.71	Yes	Bland	Very hairy	4	4

In blind taste-tests, professional chefs thought the *Capsella* soup was arparagus and offered *Capsella* soup as an SCRI 'special dish'.



SCRI Head-Chef: Alistair Campbell



Summary

- Ecotype 799.452 has most biomass due to longer (not most) leaves
- Ecotype 799.452 (leaf shape 7) was also tasted pleasant taste and reasonable smooth texture
- The most promising *Capsella* ecotypes have been named in SCRI's *Capsella* 'Heart' series
- These are 'Mother's Heart' (accession 799), and 'Shepherd's Heart' (accession 930)

* For correspondence email: Pietro.Iannetta@scri.ac.uk