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► To cite this version:

Jérémy Salinier, Marie-Christine Brand-Daunay, J Goussopoulos, C Gros, Véronique Lefebvre. The fascinating diversity of pepper and eggplant collections held at the INRA Centre for Vegetable Germplasm. 17. Eucarpia Meeting on Genetics and Breeding of Capsicum and Eggplant (2019), Sep 2019, Avignon, France. hal-02958665

HAL Id: hal-02958665

<https://hal.inrae.fr/hal-02958665>

Submitted on 6 Oct 2020

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The Fascinating Diversity of Pepper and Eggplant Collections held at the INRA Centre for Vegetable Germplasm

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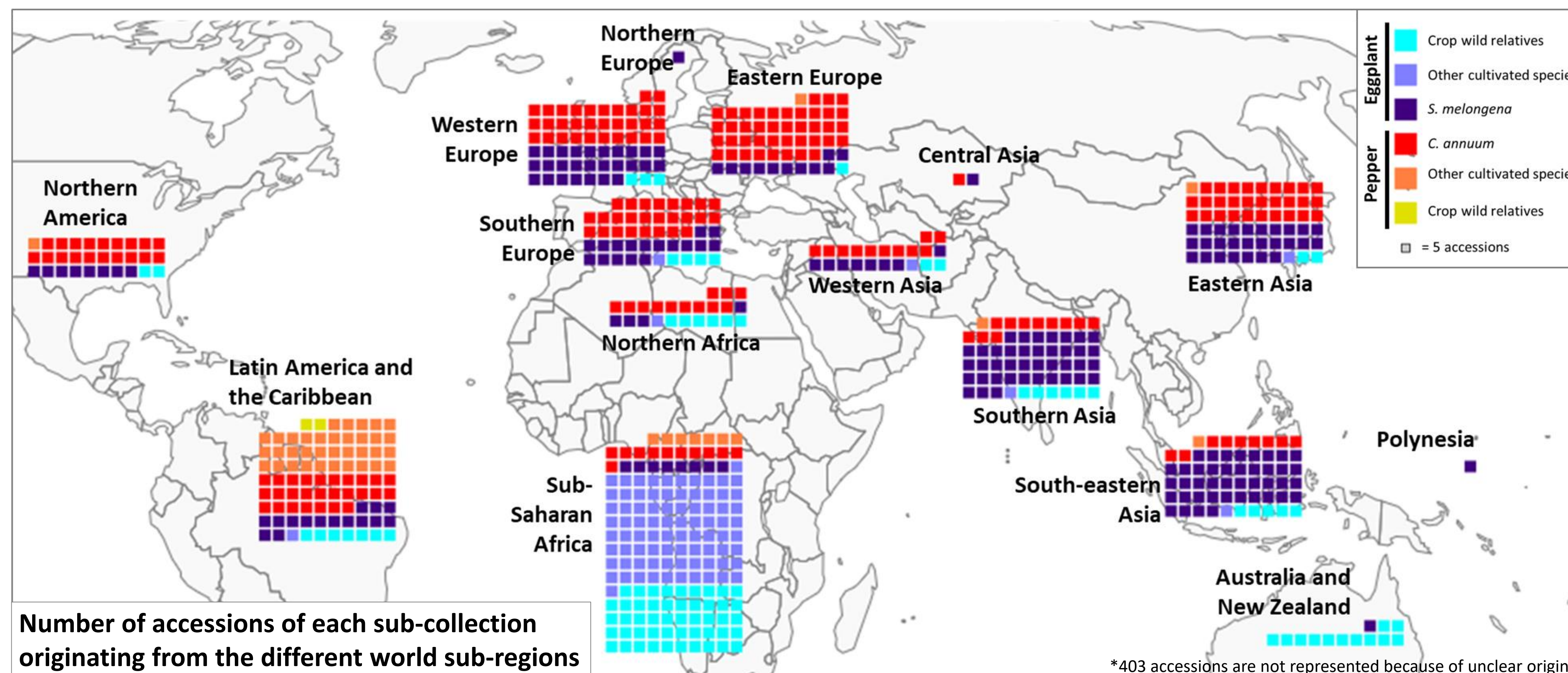
A large taxonomic diversity

- 3627 accessions (1506 pepper and 2121 eggplant) from 143 taxa
- Collected from 1962 to 2018

Pepper Collection		
Collection Sub-group	Species	Number of accessions in collection
C. annuum	<i>C. annuum</i> L.	1140
	<i>C. annuum</i> var. <i>glabriusculum</i> (Dunal) Heiser & Pickersgill	8
	<i>C. chinense</i> Jacq.	127
Other cultivated species	<i>C. baccatum</i> L.	111
	<i>C. frutescens</i> L.	72
	<i>C. pubescens</i> Ruiz & Pav.	27
	<i>C. chacoense</i> Hunz.	11
Crop wild relatives	Other 4 <i>Capsicum</i> species	10

Eggplant collection		
Collection Sub-group	Species	Number of accessions in collection
<i>S. melongena</i>	<i>S. melongena</i> L.	1071
	<i>S. insanum</i> L.	32
Other cultivated species	<i>S. aethiopicum</i> L.	327
	<i>S. anguivi</i> Lam.	39
	<i>S. macrocarpon</i> L.	81
	<i>S. dasyphyllum</i> Schumach. & Thonn.	15
Crop wild relatives	<i>S. campylacanthum</i> Hochst. ex A.Rich.	73
	<i>S. lichtensteinii</i> Willd.	14
	<i>S. incanum</i> L.	13
	<i>S. linnaeanum</i> Hepper & P.M.L.Jaeger	24
	<i>S. viarum</i> Dunal	15
	<i>S. sisymbriifolium</i> Lam.	11
	Other 120 Solanaceous species	406

Originating from all over the world



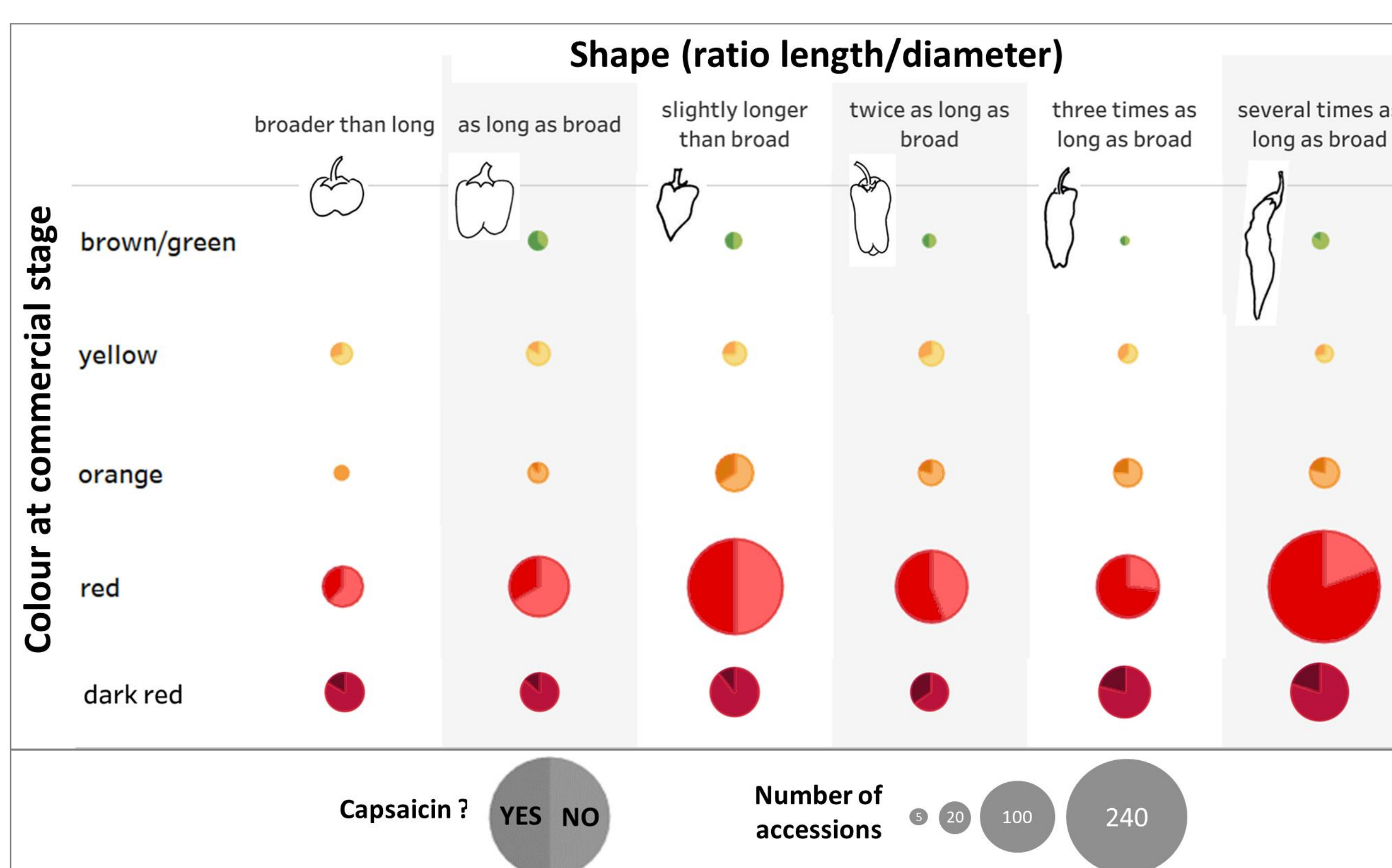
→ all domestication and diversification areas represented

→ European origin overrepresented

Presenting great phenotypic diversity

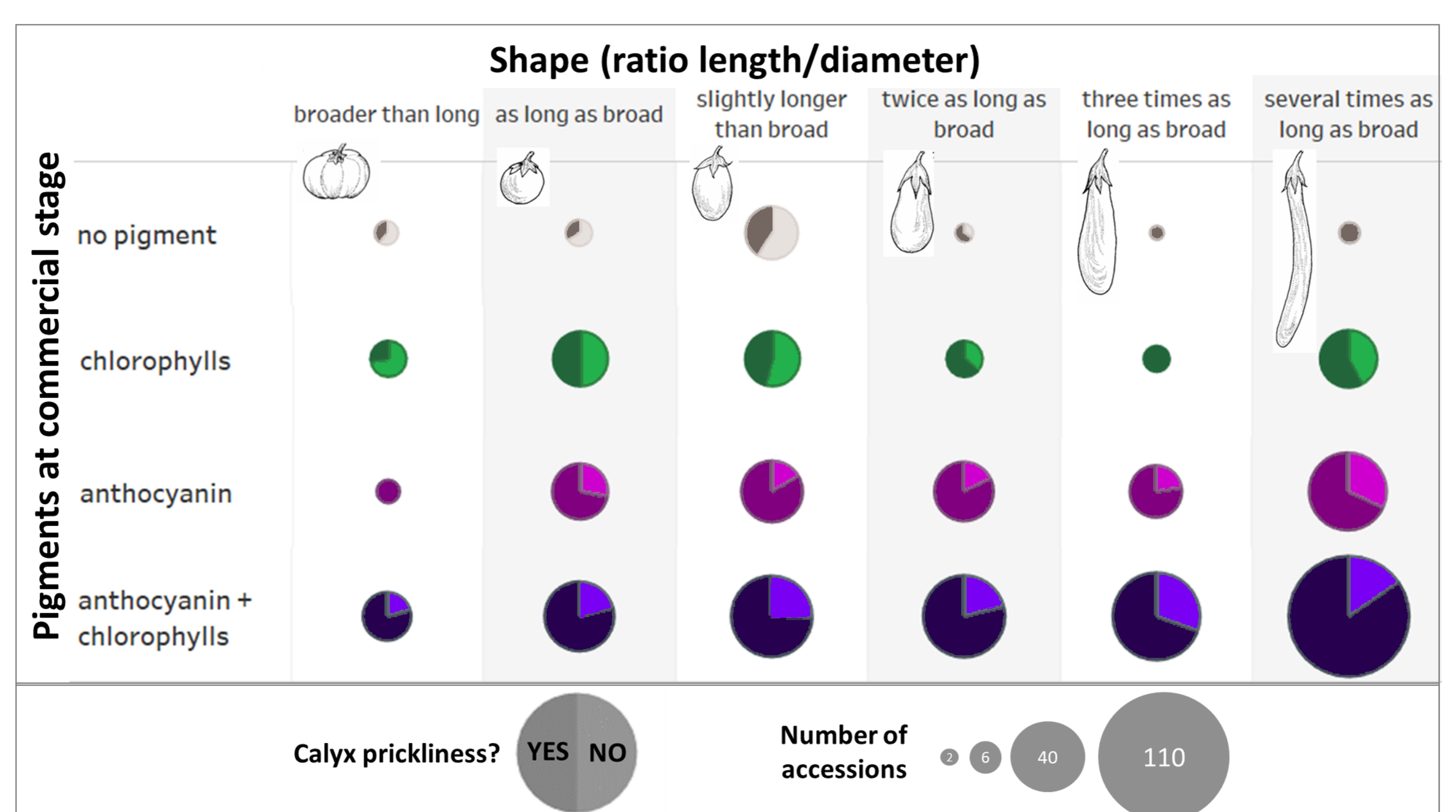
→ 57 pepper types represented

Over 60 defined types [6 Shape classes X 5 Colour x 2 Capsaicin content]
 Over 1140 *C. annuum* accessions analysed



→ 44 eggplant types represented

Over 48 defined types [6 Shape classes X 4 Pigment x 2 Calyx Prickliness]
 Over 630 *S. melongena* accessions analysed



And probable genetic diversity

→ H2020 G2P-SOL project ongoing



- 1300 pepper and 1500 eggplant accessions from INRA included in GBS and SPET genotyping
- 59 pepper and 105 eggplant accessions from INRA selected in the G2P-SOL core-collections
- Currently phenotyped by ENEA, WUR, UPV, CREA, ARO, BATEM, MVCRI, WorldVeg and INRA

