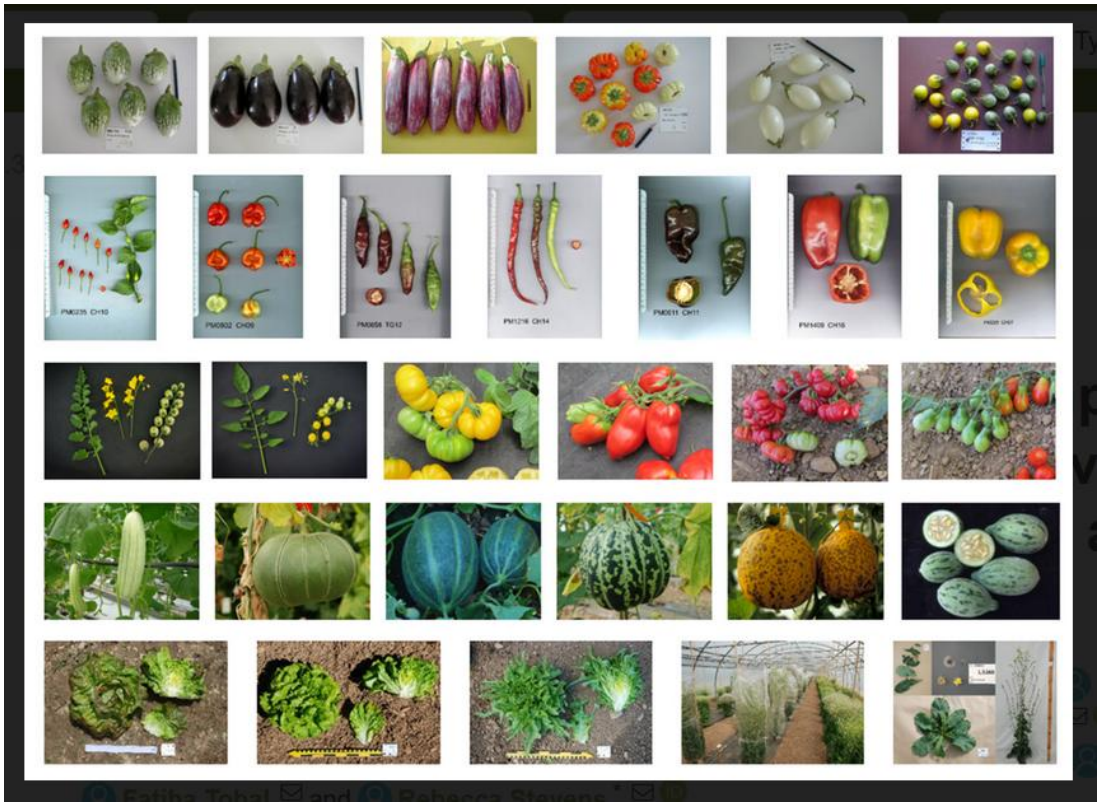
INRAE
Biological Ressource Center (BRC) for Vegetable Germplasm

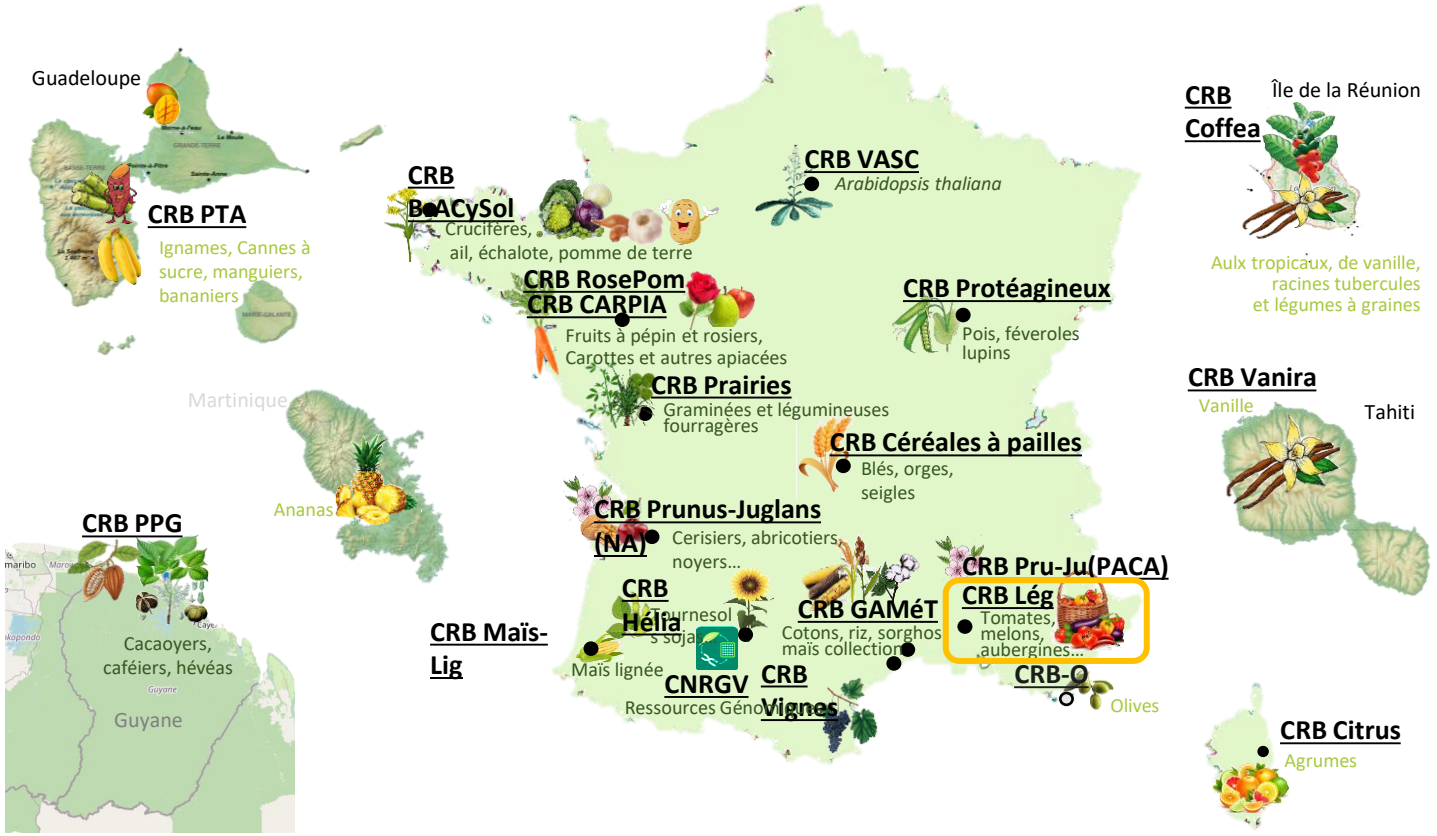
CRB-Lég

Manon Bouët



French inter-institute BRC

- 20 Plant BRCs
- Collections made by French research for research
- Collections associated to research projects and patrimonial values



GAFL and CRB-Lég

UR – Genetics and Improvement of Fruits and Vegetables

Research focusing on genetic diversity

Domestication

Abiotic stress

CRB-Lég

5 PERMANENT POSTS

~10% OF GAFL

Fruit quality

Biotic stress

Robustness

Resistance durability

Fruit development

Resilience

Vegetable research on:

- Tomato
- Pepper
- Melon
- Aubergine

But not anymore on **lettuce**…

CRB-Lég Collections

➔5 collections

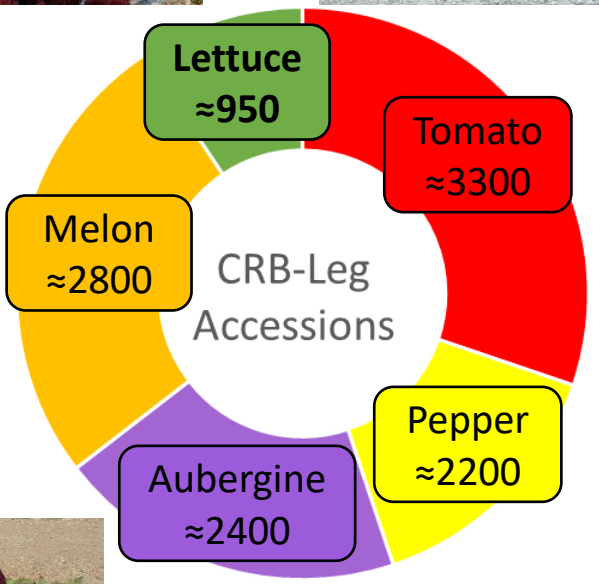
≈12 000 accessions
- Landraces
- Modern varieties
- Crop Wild Relatives
- Scientific genetic resources

3 public-private Networks
- **Melon**
- **Solanaceae** (Tomato + Aubergine + Pepper)
- **Lactuca** (Lettuce)













Lettuce collection

Lactuca sativa

750 cultivated varieties (landraces and modern)







Lettuce collection

≈200 accessions of Crop Wild Relatives (CWR)
Genus *Lactuca*
11 species other than *L. sativa*



Lactuca saligna



Lactuca serriola



Lactuca virosa

Ex situ conservation

- -18°C in airtight container
- 15 to 20 years
- Multiplied by the Network partners
- Phenotype stability verified n+1
- Problems with some CWR





Description

Passport data

Primary descriptors + photos

- Seed: color, germination
- Seedling: anthocyanin
- Leaf:
- Lettuce head: color, anthocyanin, size
- Cultigroup
- Flower: phenology, anthocyanin

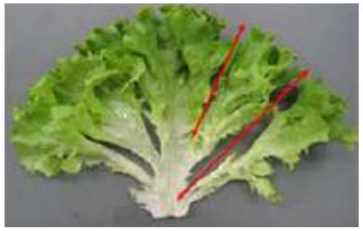

1
nul ou faible


2
moyen


3
fort

Secondary descriptors

- Resistance to pathogens (Bremia, nematode)




1
absent or very few


3
few


5
medium


7
many


9
very many

Use of the collection

3 types of collection

Collections	INRAE	Network	National
Lettuce	0%	845 89%	103 11%
Melon	492 17%	2242 79%	102 4%
Pepper	1472 67%	631 29%	92 4%
Tomato	2181 66%	1066 32%	55 2%
Aubergine	1610 67%	693 29%	85 4%
TOTAL	5755 52%	5477 45%	437 4%

Use of the collection

Status and availability:

➢ *Lactuca Network collection*

Restricted to Public research and Network partners

Other: need validation from all partners

➢ *National collection*

Open to research and selection with sMTA

Existing use and its valorisation, ongoing projects

➔Network partners

➔EVA Lettuce

INRAE

Thank you for your attention!