



**Ms. Rosella Giunta, PhD**

**Italian National Council of Research (CNR)  
Institute of Bioscience and Bioresources  
(IBBR – Bari)**

***EUROPEPLAND– Implementing a trans-EUROpean  
PEPper LANDrace collection for resilient agriculture***

***30 October 2024, Almeria, Spain***



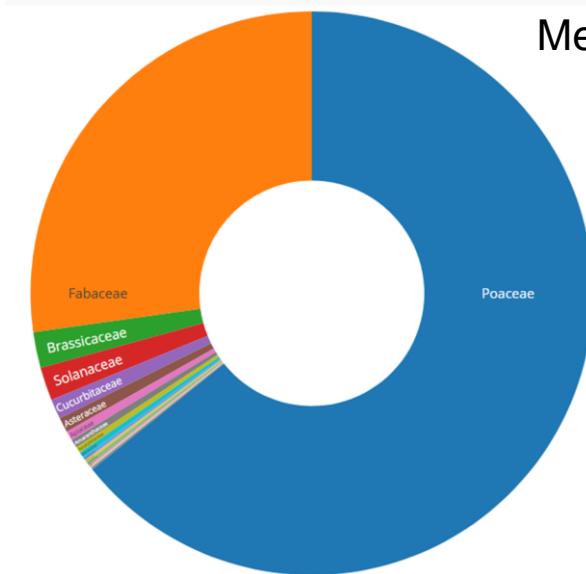
# The Institute of Biosciences and Bioresources (CNR-IBBR)



Founded in 2013 merging IGV (Plant Genetics Institute) IGB (Institute of Genetics and Biophysics) and IBP (Institute of Protein Biochemistry). Headquarters are in Bari with 5 different divisions (Florence, Naples, Palermo, Perugia and Portici). IBBR personnel consists of 159 units.

## Research Outlines:

1. Biology of model species
2. Conservation, management, sustainable use of natural, agricultural and forest bioresources
3. Biotechnologies and plant breeding
4. Biomolecules engineering
5. Nutraceutics and functional food for human health



<https://www.ibbr.cnr.it/mgd/>



Mediterranean Germplasm Genebank, Portici Division



Storage facilities	Temp.	R.H.
n. 1 cold room for long-term storage	-20° C	-
n. 1 cold rooms for medium-term storage ("active" collections)	0 ° C	35%
n. 2 cold rooms for short-term storage (temporary material or material under processing, etc.)	5 – 7 ° C	35%
n. 1 cold room for research materials	5 – 7 ° C	35%

# IBBR Bari project activities on pepper



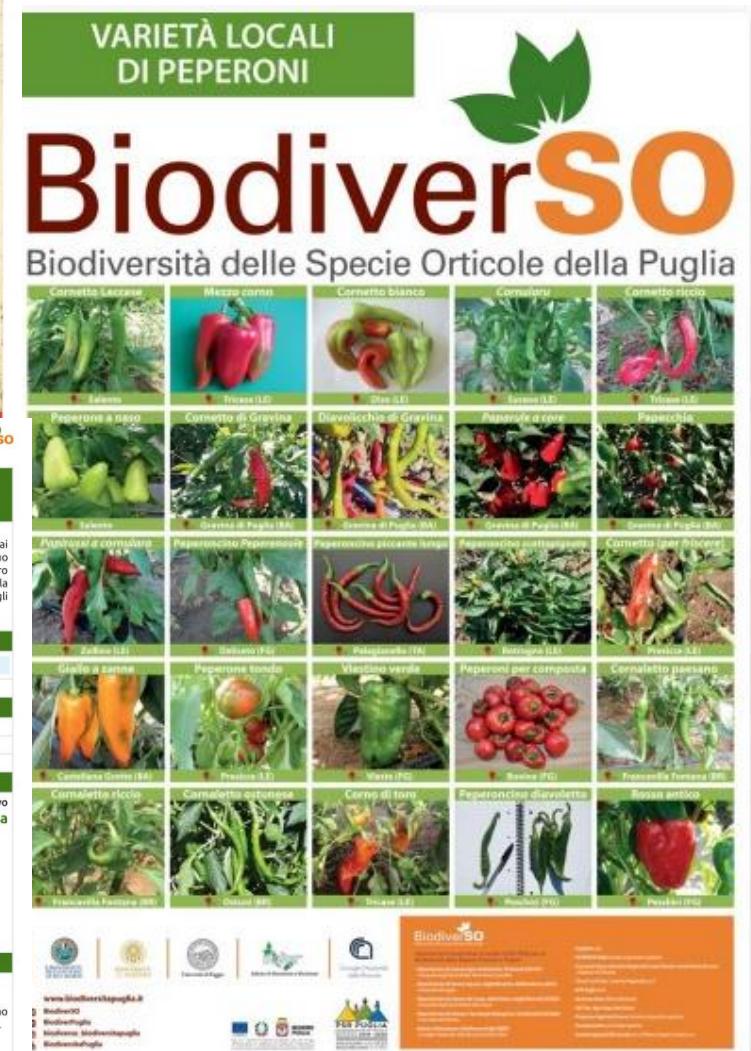
- **2023-2025 RGV-FAO VII** Activities on specific segments of the germplasm collection of the IBBR-CNR in Bari: a) multiplication, b) rejuvenation, c) morpho-agronomic, biochemical and molecular characterization, d) cataloguing, e) long-term and short-term conservation f) distribution - *Dr. Laghetti*
- **2021-2023 PAPRIKANET.IT** - Valorization of biological, morpho-agronomic, genetic and nutraceutical characteristics for the development of new organic supply chains (Lucanian ecotypes of peppers and eggplant)
- **2020-2023 NUTRI.FE** Collect accessions of *C. annuum* (about 20 local landraces from Basilicata region) and application of biostimulants - *Dr. Finetti-Sialer*
- **2018-2022 TINNOGEPRA** Selection of 'peperone di Senise' germplasm and improvement of agronomic and IPM practices to reduce fungal diseases and mycotoxin contamination; biochemical analysis for capsaicin content and for ASTA value; study of genomic plasticity - *Dr. Finetti-Sialer*
- **2013-2016 PAPSEN** Collection and morphological characterization of *Capsicum* sp. from the regions of Thies, Djourbel and Fatick in Senegal - *Dr. Laghetti*



Credits: Mariella Finetti-Sialer

# IBBR Bari project activities on pepper

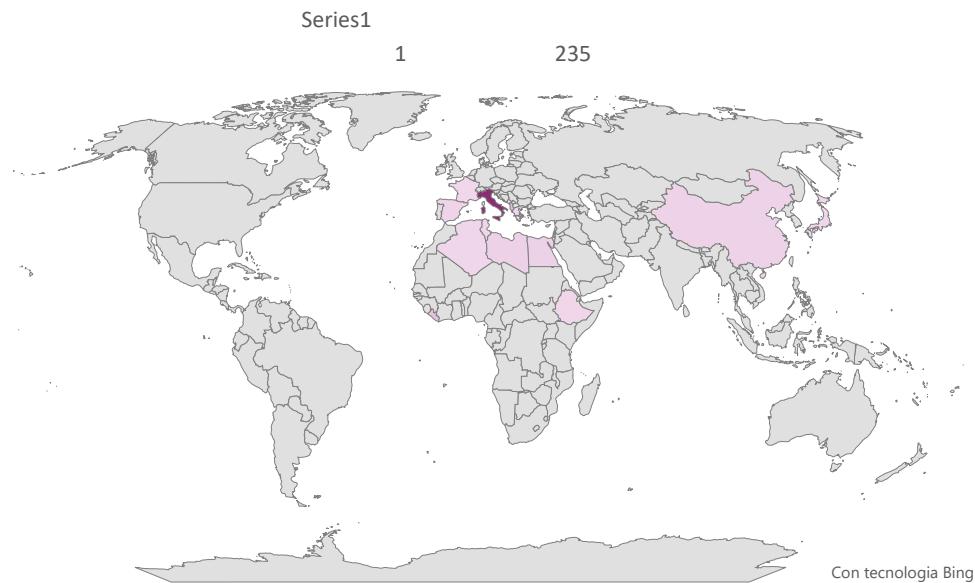
- **2013-2018 BIODIVERSO** Collection, conservation, morphological and molecular characterization of traditional local varieties of Apulian vegetable crops (Cucurbitaceae, Solanaceae, Leguminosae, Asteraceae, Brassicaceae...) - *Dr. Sonnante*
  - **2017-ongoing BIODIVERSO-KARPOS** Follow-up activities on agronomic and morphological characterization; genetic characterization of local pepper varieties by high-throughput sequencing and nutritional characterization – *Dr Blanco/Dr Sonnante*



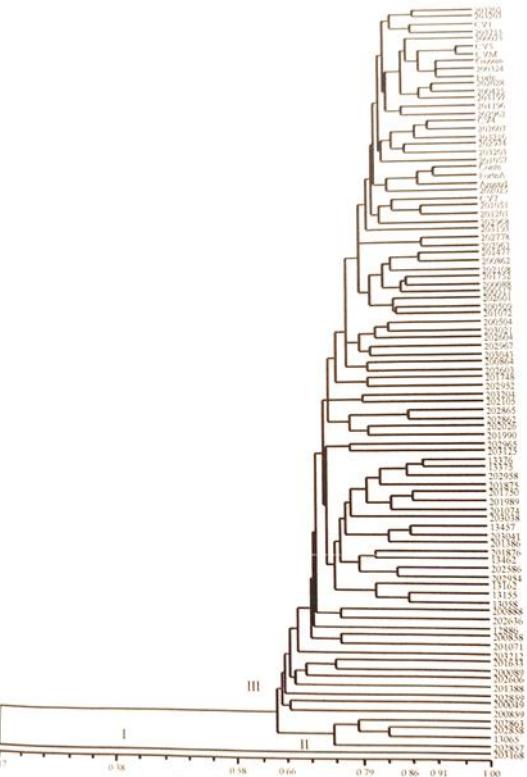
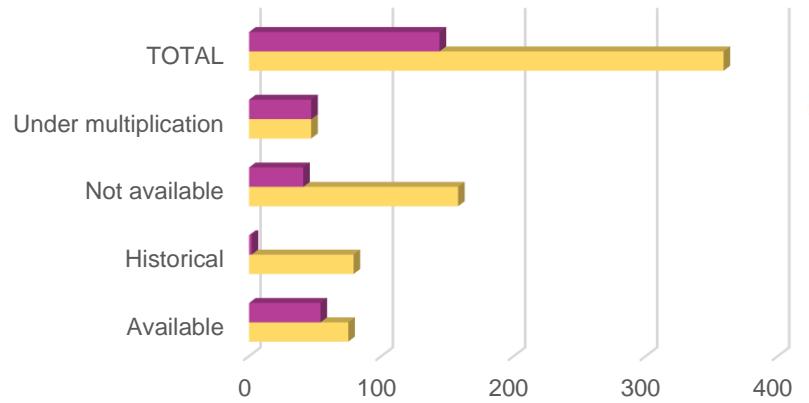
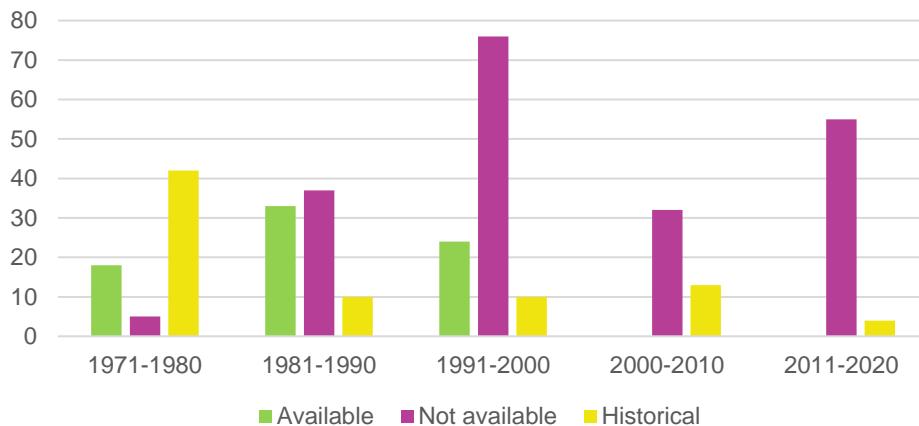
# The Capsicum spp. Collection at MGG



## Origin of the accessions



## Collecting missions



Source: N. Baser, 2005

# The Italian pepper landraces collection

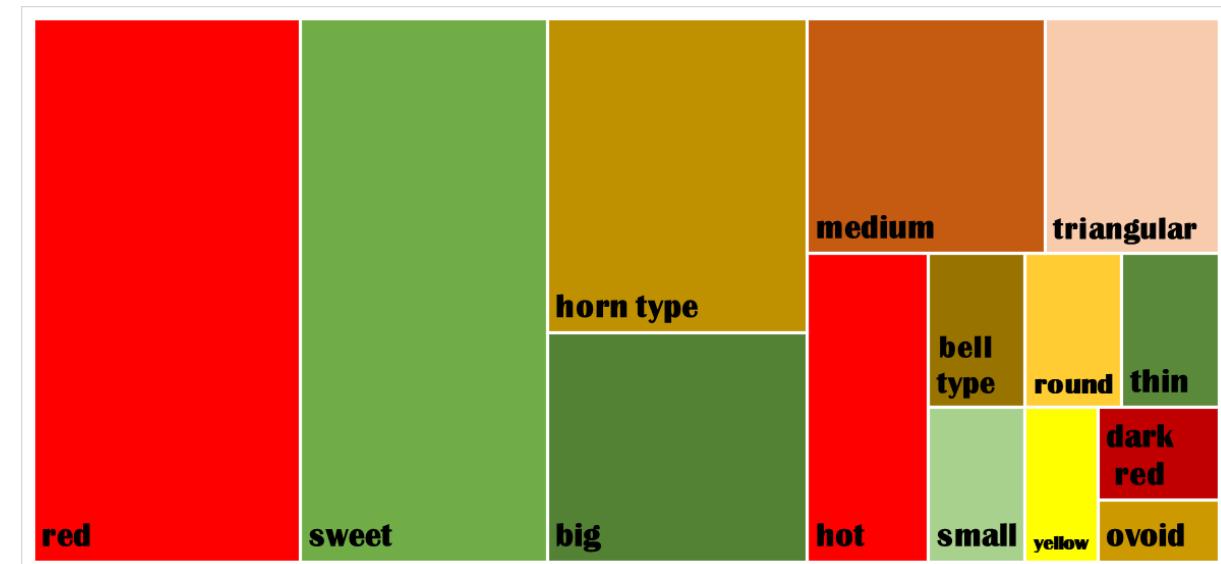


## Origin of collected materia



## Available

Abruzzo	1
Basilicata	24
Calabria	10
Campania	1
Puglia	14
Sicilia	1
TOT.	51



# Descriptors (qualitative)

## Plant (16)

## Flower (2)

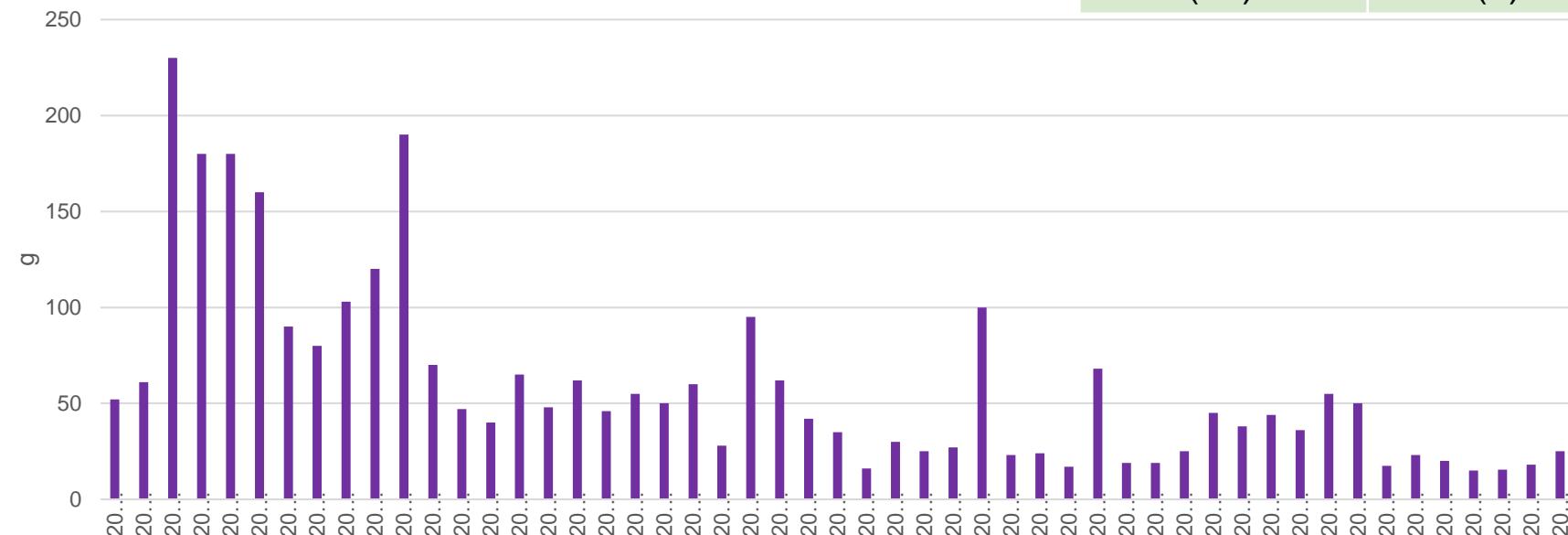
## Fruit (25)

## Descriptors (Qual./quant.)

## Plant (8)                          Plant (3)

## Flower (6)      Flower (2)

## Fruit (20)      Fruit (4)



# THANK YOU FOR YOUR ATTENTION

