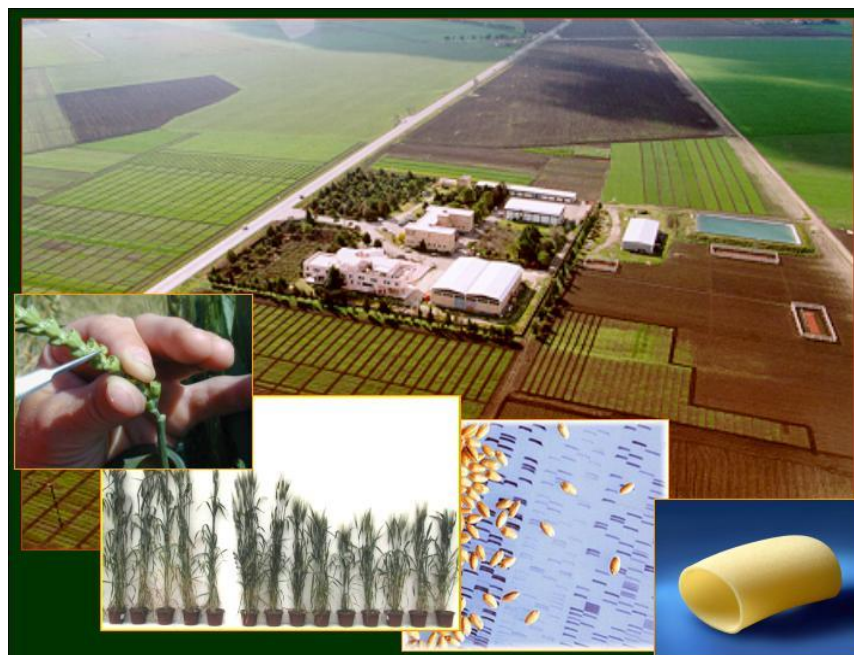


Agata Rascio

**CREA-CI Centro di Ricerca per la Cerealicoltura e le Colture Industriali
Foggia - Italy**



TRAINING ON IDENTIFICATION OF BOTANICAL VARIETIES IN TRITICUM SPECIES

Piešťany, Slovakia, 17– 19th September 2019

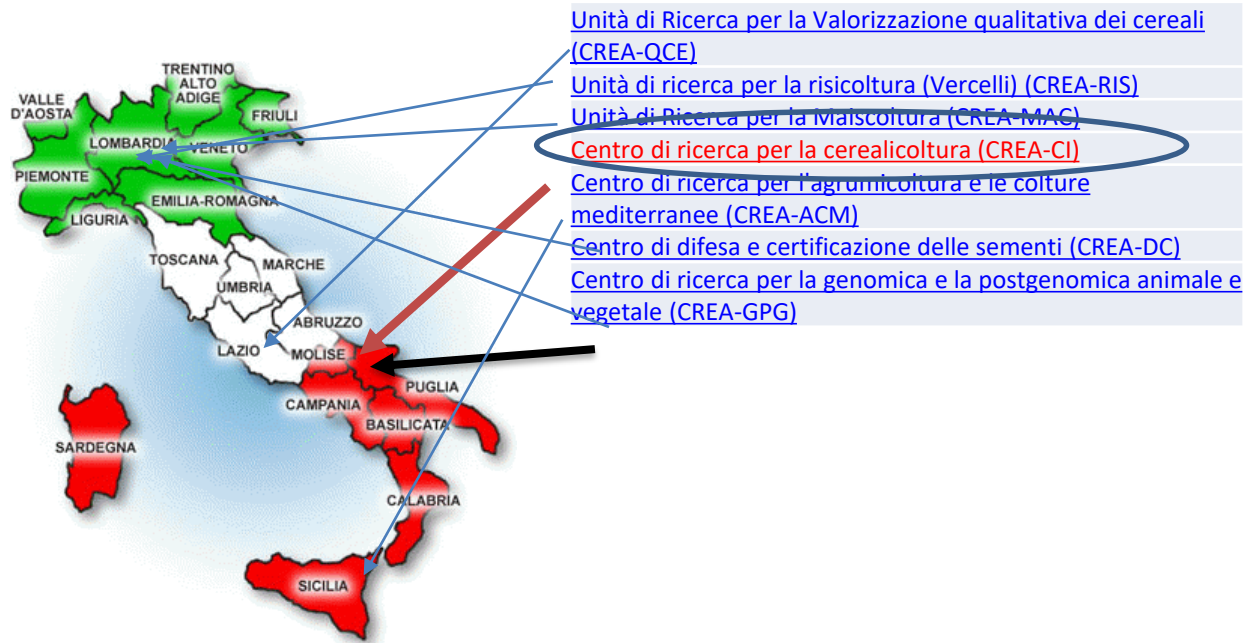


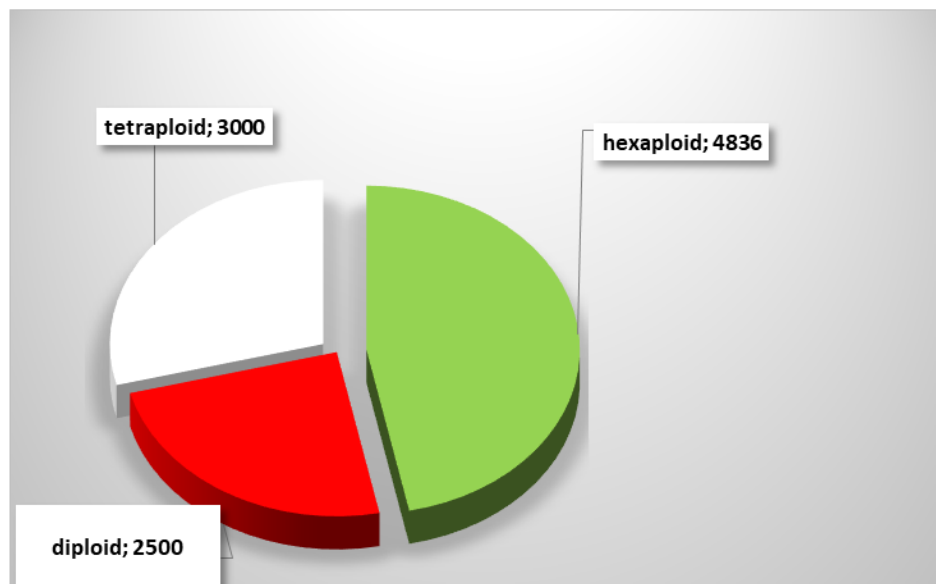
12 RESEARCH CENTERS
1900 RESEARCHERS AND TECHNOLOGISTS
60 EXPERIMENTAL FARMS

1	2	3	4	5	6
					
ZOOTECNIA E ACQUACOLTURA	FORESTE E LEGNO	CREA-CI (Foggia)	GENETICA E BIONFORMATICA	AGRICOLTURA E AMBIENTE	DIFESA E CERTIFICAZIONE
					
VITICOLTURA ED ENOLOGIA	ORTICOLTURA E FLOROVIVAIISMO	OLIVICOLTURA, FRUTTICOLTURA E AGRICOLTURA	INGEGNERIA E TRASFORMAZIONI AGROLIMENTARI	ALIMENTI E NUTRIZIONE	POLITICHE E BIOECONOMIA
7	8	9	10	11	12

CREA CENTERS

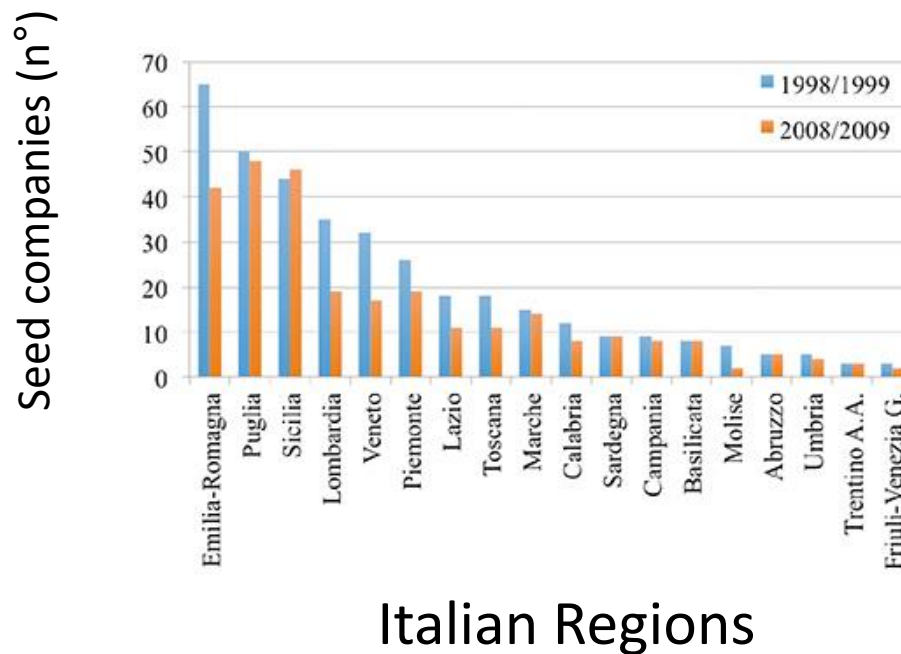
CREA units and centres devoted to cereals





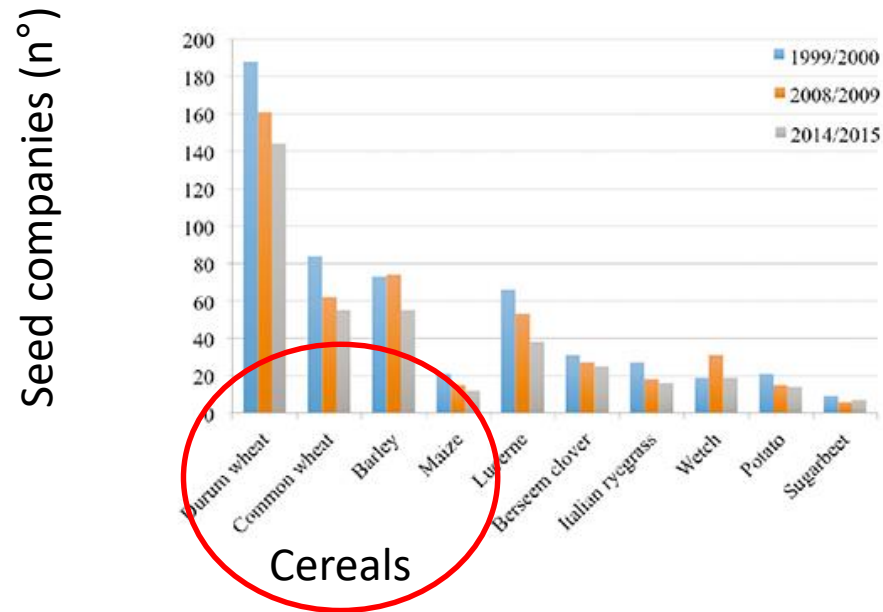
Approximate number of Triticeae genus working collections of CREA-CI

About 360 seed companies in Italy



Nardi, M. (2016). The role of the seed sector in Italy for a modern and competitive agriculture. *Italian Journal of Agronomy*, 11(2), 137-142.

Main sectors of activity of seed companies



Nardi, M. (2016). The role of the seed sector in Italy for a modern and competitive agriculture. *Italian Journal of Agronomy*, 11(2), 137-142.

Some projects funded by the Ministry of Agriculture, Food and Forestry Policies

"BIODATI"

Biodiversity Conservation, Data Bank Management and Genetic Improvement



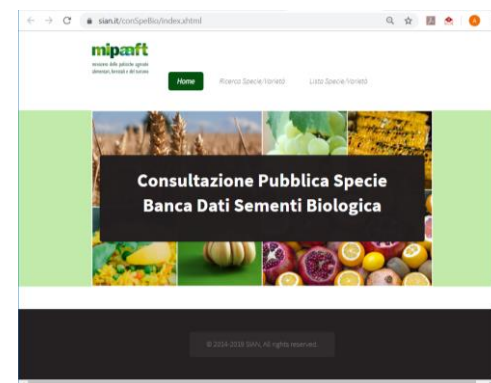
"ESPLORA"

molecular characterization
plant diversity

Main species	Collection type	Number of accessions	Genotyping platform
Barley <i>Hordeum vulgare</i>	Cultivars, landraces and wild relatives	>1000	SNP-Chip, Exome sequencing
Rice <i>Oryza sativa</i>	Cultivars	300	Genotyping-By-Sequencing
Wheat <i>Triticum durum</i> + <i>Triticum aestivum</i>	Cultivars, landraces and wild relatives	230 + 500	SNP-Chip, Exome sequencing

"SIAN"

Organic Seed Database



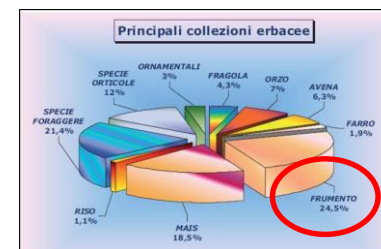
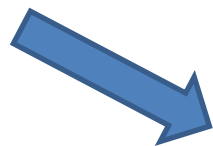
Ongoing projects



RGV-FAO



Italian database of plant genetic resources for food and agriculture



Wheat = 25% of 20.000 herbaceous accessions, surveyed by RGV-FAO project

TRAINING ON IDENTIFICATION OF BOTANICAL VARIETIES IN TRITICUM SPECIES

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Accession number	Institution	Accession number	Accession number
CZE122	Genebank Dept. Div. Genet. & Plant Breed. - Res. Inst. Crop Production Prague 6 - Ruzyně	12745	RICP
DEU001	Institute of Crop Science - Federal Research Center for Agriculture (FAL) Braunschweig	127	BGRC
DEU146	Genebank - Inst. for Plant Genetics and Crop Plant Research (IPK) Gatersleben	28524	IPK
ESP004	Centro de Recursos Fitogenéticos Alcalá de Henares - Madrid	2928	CRF
EST001	Lojzeva Plant Breeding Institute Lojzeva	23	EST
FRA040	Station d'Amélioration des Plantes INRA Clermont-Ferrand Cexex	1969	FRA
FRA051	Unité expérimentale du Maïsgerand GEVES Surpères	279	GVS
GBR011	John Innes Centre Norwich Research Park Norwich - Norfolk NR4 7UH	9461	JIC
GEO001	Scientific Research Institute of Farming Mshkheta - Tserovani	66	GEO001
GEO007	Mshkheta Selection Station Village Tsikani - Tserovani - M	1	GEO007
GEO013	N.Ketskhoveli Institute of Botany Tbilisi	79	GEO013
GRC005	Greek Genebank - Agric. Res. Center of Makedonia and Thraki - NAGREF Thessaloniki	686	GGB
GRC035	Nat. Agric. Res. Foundation - Direc. Int. Relat. - Document. and Info. Athens	170	NAGR
HUN003	Institute for Agrobotany Tarpoczka	5536	RCAT
HUN020	Agricultural Research Institute Hungarian Academy of Sciences Martonvasar	839	MVGB
IRI029	Department of Agriculture - Food and Rural Development - National Crop Leixlip - Co. Kildare	33	IRI029TRI
ISR002	Israel Gene Bank for Agricultural Crops - Agricultural Research Org. - Bet Dagan	775	ISR002
ISR003	Lieberman Germplasm Bank - Inst. Cereal Crop Dev. - Tel-Aviv Univ. - Tel-Aviv	12292	ISR003
ITA079	Istituto Sperimentale per la Cerealicoltura - Sez. Operativa Foggia	547	ITAFG
ITA226	Istituto Sperimentale per la Cerealicoltura Catania	310	ITACI
ITA266	Istituto Sperimentale per la Cerealicoltura S. Angelo Lodigiano (MI)	3005	ITASAL
ITA349	Istituto Sperimentale per la Cerealicoltura Roma	299	ITAROM
LTU001	Lithuanian Institute of Agriculture Dotnuva-Akademiai, Kedainiai D	47	LTU



6161 CREA accessions of cereals in EURISCO

Species	Accession name	Accession number	Status	Country of origin
Triticum durum DESF.	Aconchi	ITAFG 1	not known	
Triticum durum DESF.	Adamello	ITAFG 2	not known	ITA
Triticum durum DESF.	Adige	ITAFG 3	not known	ITA
Triticum durum DESF.	Aerial	ITAFG 4	not known	FRA
Triticum durum DESF.	Aertdur	ITAFG 5	not known	FRA
Triticum durum DESF.	Ajaia	ITAFG 23	not known	
Triticum durum DESF.	Alcarova	ITAFG 6	not known	
Triticum durum DESF.	Alcamin	ITAFG 7	not known	
Triticum durum DESF.	Aldara	ITAFG 8	not known	USA
Triticum durum DESF.	Altar	ITAFG 9	not known	
Triticum durum DESF.	Ambex	ITAFG 10	not known	CAN
Triticum durum DESF.	Ambreal	ITAFG 11	not known	FRA
Triticum durum DESF.	Amedeo	ITAFG 12	not known	ITA
Triticum durum DESF.	Antas	ITAFG 13	not known	ITA
Triticum durum DESF.	Anton	ITAFG 14	not known	
Triticum durum DESF.	Apple	ITAFG 15	not known	ITA

HOLDING INSTITUTE	COLLECTING SITE
InstCode	CollSite
IDENTIFICATION AND TAXONOMY	Latitude
Accession	Longitude
Genus	Elevation
Species + SpAuthor	ADVANCED MATERIAL
SubTaxon + Sub TAuthor	BredCoder BredDescr
Syn (Taxonomic synonyms)	Ancest
CropName + CropName ENG	DonorCoder DonorDescr
Originalty	DonorNumb
SampleStat	OTHER INFORMATION
ACQUISITION AND MAINTENANCE	DuplStat DuplDescr
AcqDate	OtherNumb
CollSite	YearReg (Year of registration/first description)
Storage	Remarks
AccNumb	AccURL
MLStatus	AccSite (main altitude)
AEGSStatus	Avail (Availability)
COLLECTED MATERIAL	
CollCoder CollDescr	
CollNumb	
CollSite	

547 tetraploid wheat accessions with passport descriptors are in EURISCO

TRAINING ON IDENTIFICATION OF BOTANICAL VARIETIES IN TRITICUM SPECIES

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ECP/GR

Status of AEGIS candidate collection

Number of AEGIS accessions per country of origin

ECPG Activity	ORIGCTY	T. aestivum (6X)	T.spelta (6X)	tetraploid wheat species (4X)	T.Monococcum (2X)	Secale cereale
TRAID	ITA	183	-	1	-	-
TRISECA	ITA	-	-	14	-	-

**NATIONAL RESEARCH COUNCIL
Institute of Biosciences and
BioResources CNR-IBBR**



**VALORIZATION OF GERMPLASM COLLECTION
AT CNR-IBBR BARI (ITALY)**



Recovery, characterization, safeguard
and valorization of cereals and
forage species in Puglia Region.

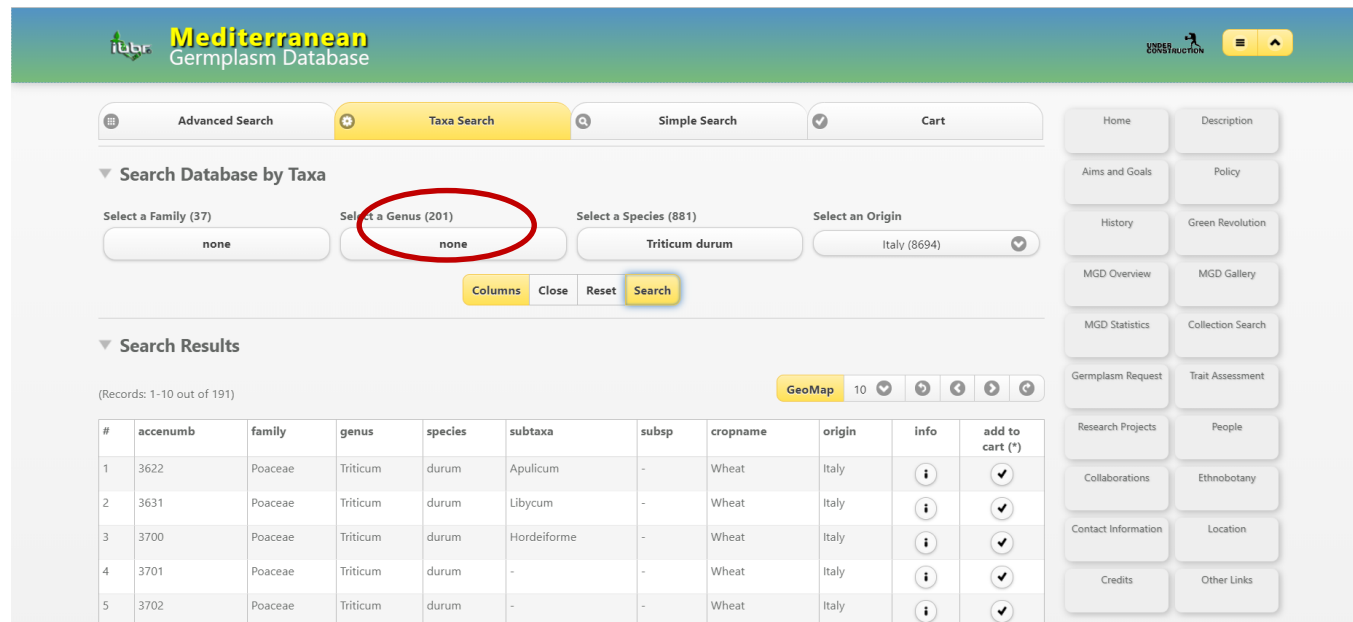
TRAINING ON IDENTIFICATION OF BOTANICAL VARIETIES IN TRITICUM SPECIES

Piešťany, Slovakia, 17– 19th September 2019



ECP/GR

VALORIZATION OF GERmplasm COLLECTION
AT CNR-IBBR BARI (ITALY)



The screenshot shows the 'Mediterranean Germplasm Database' search interface. The 'Taxa Search' tab is selected. Under 'Search Database by Taxa', the 'Select a Genus (201)' dropdown menu is highlighted with a red circle and contains the text 'none'. Other search criteria include 'Select a Family (37)' set to 'none', 'Select a Species (881)' set to 'Triticum durum', and 'Select an Origin' set to 'Italy (8694)'. A 'Search' button is visible. Below the search criteria, the 'Search Results' section shows '(Records: 1-10 out of 191)'. A table displays the first five results, all of which are wheat accessions from Italy.

#	accnumb	family	genus	species	subtaxa	subsp	cropname	origin	Info	add to cart (*)
1	3622	Poaceae	Triticum	durum	Apulicum	-	Wheat	Italy	i	✓
2	3631	Poaceae	Triticum	durum	Libycum	-	Wheat	Italy	i	✓
3	3700	Poaceae	Triticum	durum	Hordeiforme	-	Wheat	Italy	i	✓
4	3701	Poaceae	Triticum	durum	-	-	Wheat	Italy	i	✓
5	3702	Poaceae	Triticum	durum	-	-	Wheat	Italy	i	✓

201 accessions of durum wheat are listed on the database edited by IBBR

“SARAB” project Abruzzo Region
Characterization of ancient local populations of Saragolla



**Regione Abruzzo - Majella Seed
Bank of Abruzzo Region**

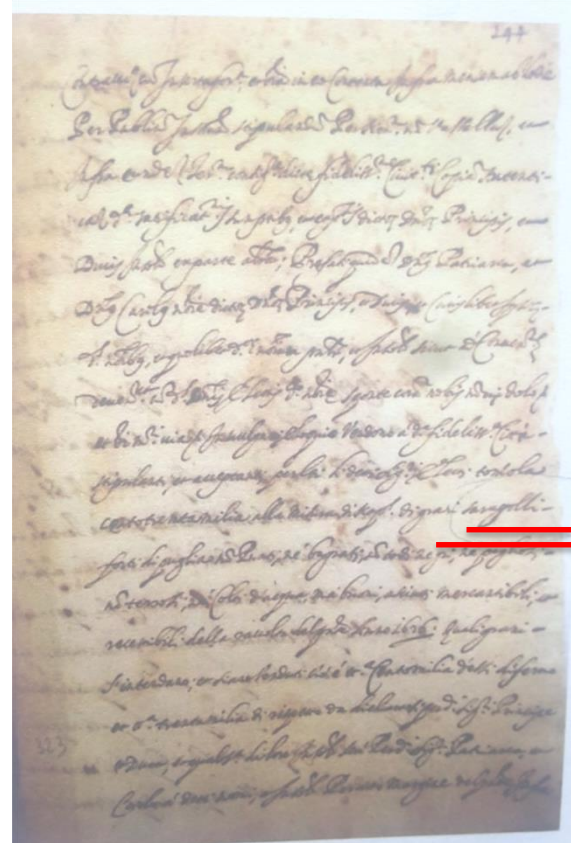
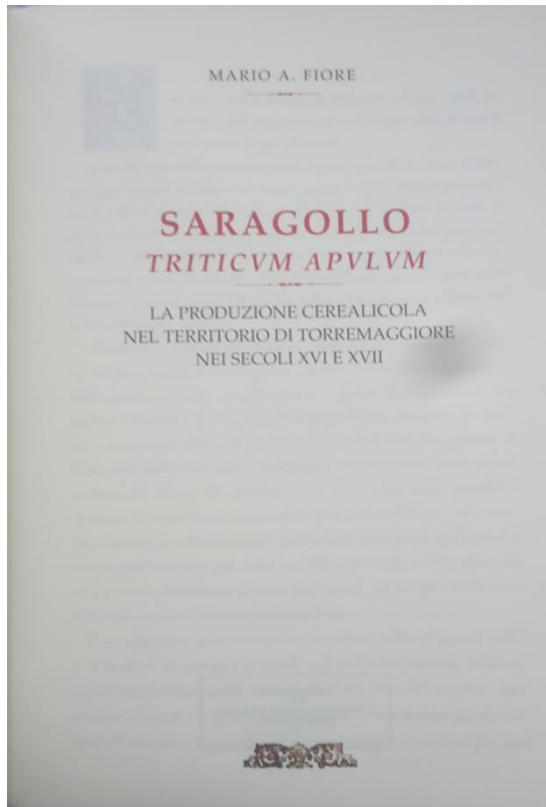


Regione Abruzzo – Dipartimento Agricoltura (PE)



**TRAINING ON IDENTIFICATION OF BOTANICAL VARIETIES IN TRITICUM
SPECIES**

Piešťany, Slovakia, 17– 19th September 2019



Seventeenth century affidavit between the prince of San Severo (province of Foggia) and the Viceroy of Naples, for the sale of *Saragollo forte* of Puglia

M. Fiore (2013) *Saragollo triticum apulum*, Cooperativa Fortore, Torremaggiore)

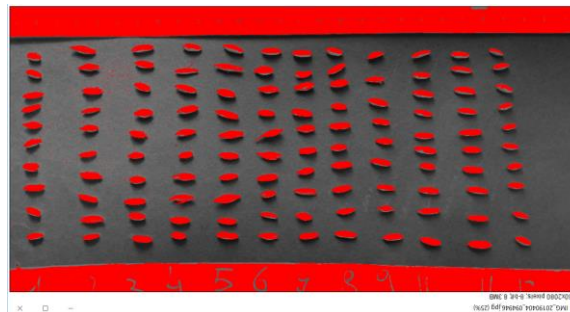


Morphological diversity observed within a single accession of Saragolla population, isolated in Abruzzo Region



1 2 3 4 5 6 7 8 9 10 11 12

Representative seed types found in each Saragolla
population from Abruzzo region



The effect of thresholding procedure for seed images processing
by ImageJ software

I thank very much



Silvana Paone and Pasquale Codianni

for their helpful and valuable collaboration