



Practical approaches to create the list of Most Appropriate Accessions

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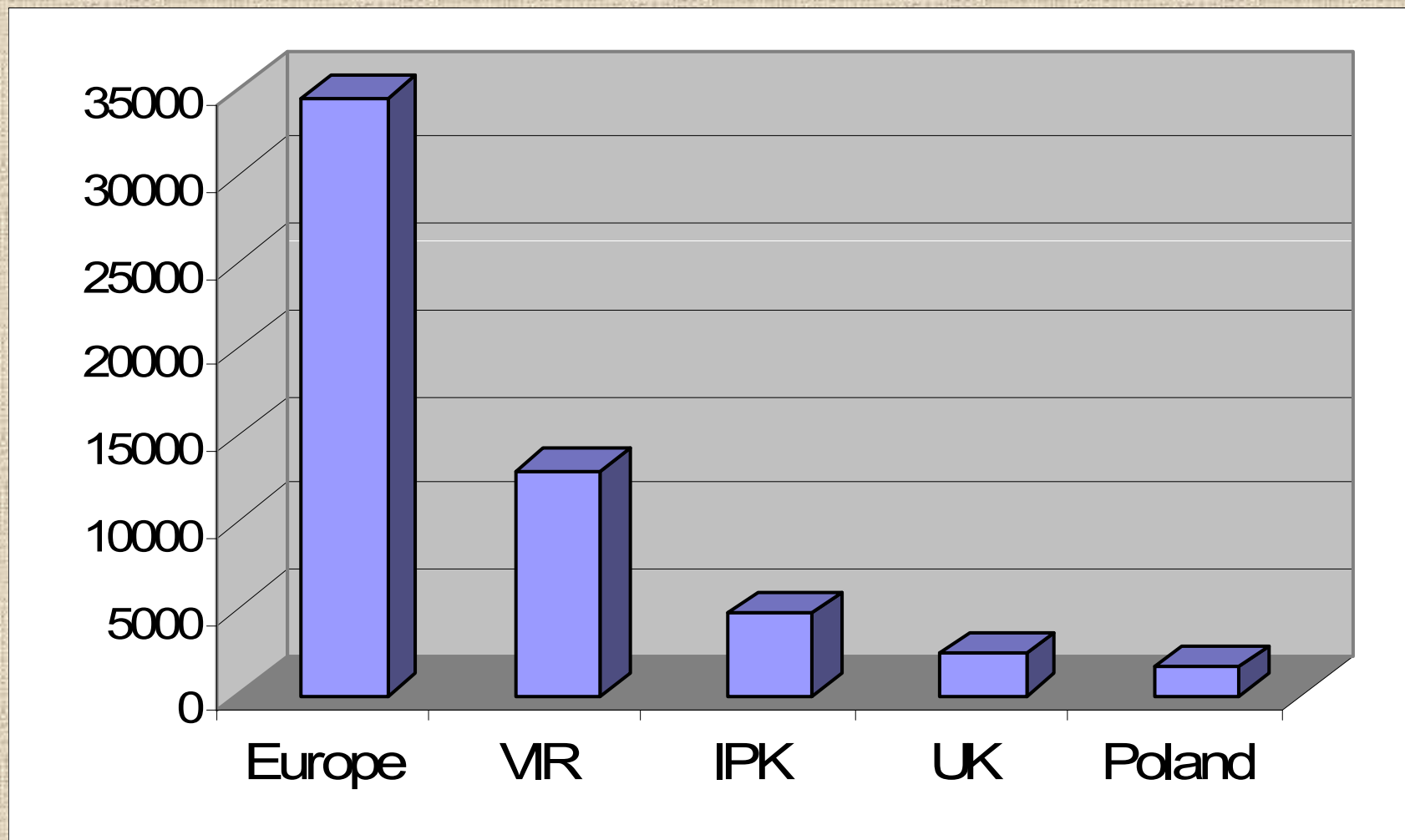
N. I. Vavilov Institute of Plant Industry is harbored one of the largest oat collection.

There is more than 12 700 accessions there.

It presents world genetic diversity of *Avena* genera with wide variability of morphological, agronomical and biochemical characters for oat breeding and crop industry.

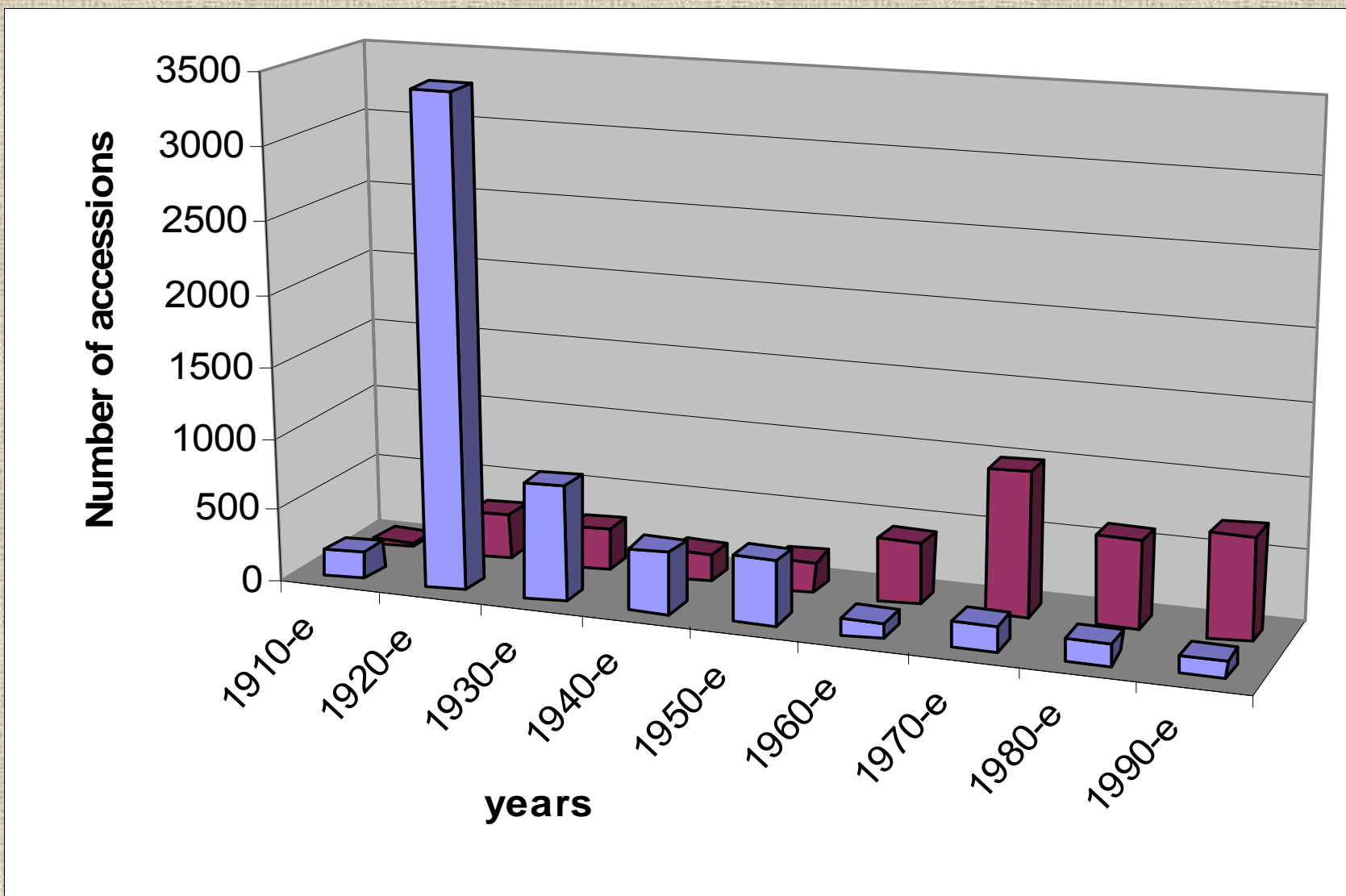


Number of oat accessions in European collections



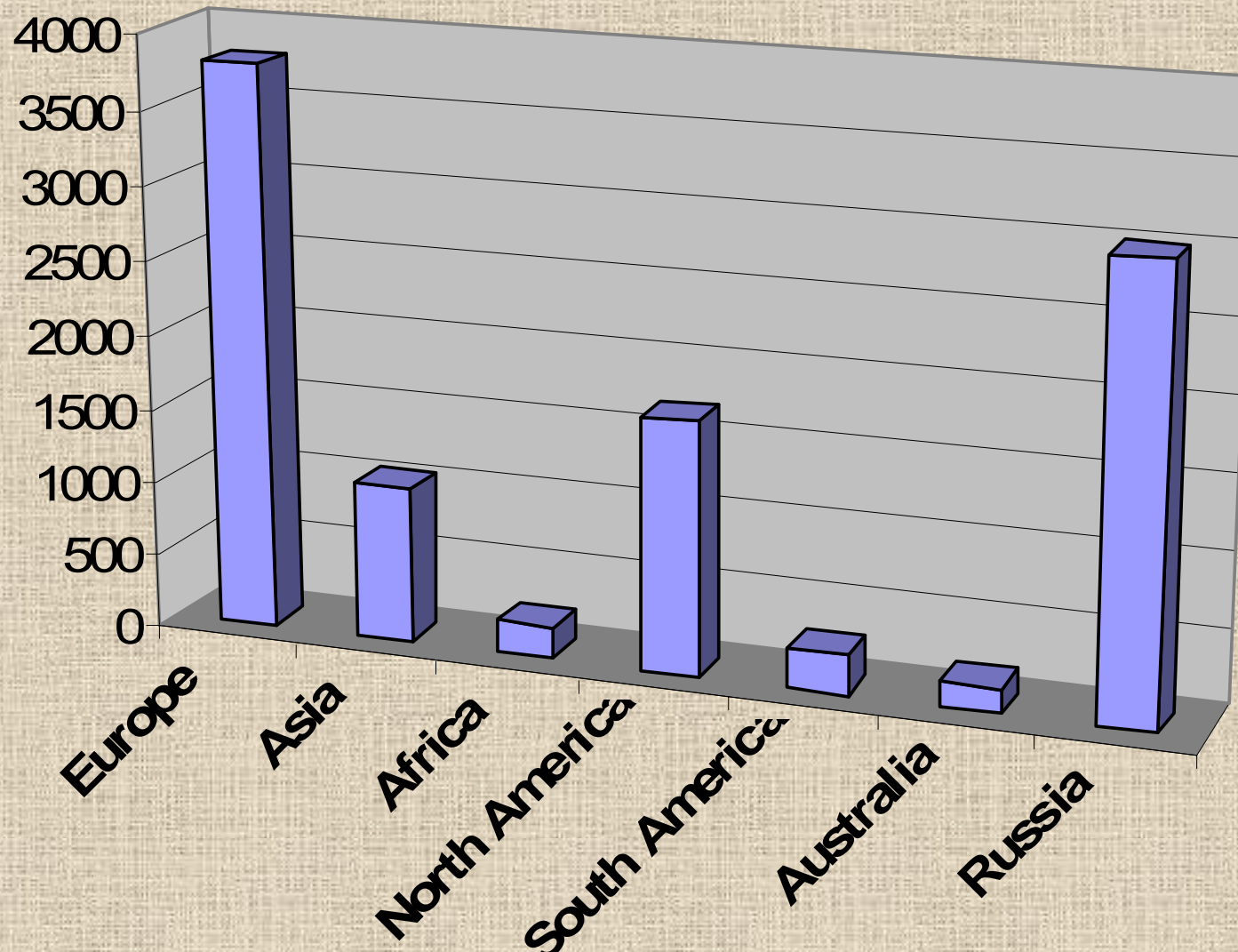


Distribution of local and breeding varieties of oat in VIR collection





Geographical diversity of VIR world oat collection





Tools for identification MAA and duplicats

VIR OAT PASSPORT DATABASE

**VIR Oat database in
Paradox 9 for Windows software
amounted to 18 178 Kb and
contained over 12 700 records
in 43 fields.**



List the most important fields of descriptors

1. Taxonomical group

5. Genus (GENUS) I-V

6. Species (SPECIES) I-V

7. Species authority (SPAUTHOR) I-V

8. Subtaxa (SUBTAXA) I-IV

9. Subtaxa authority (SUBTAUTHOR) I-IV

2. Geographical group

13. Country of origin (ORIGCTY) I-V

14. Location of collecting site (COLLSITE) I-II

22. Collecting/acquisition source (COLLSRC) I-V

23. Donor (country) institute code (DONORCODE) I-V



3. Name and Numeric group

2. Accession number (ACCENUMB) I, V

3. Collecting number (COLLNUMB) I, II

11. Accession name (ACCENAME) III, IV

12. Acquisition date [YYYYMMDD] (ACQDATE) I-V

18. Collecting date of sample [YYYYMMDD] (COLLDATE) I, II

24. Donor accession number (DONORNUMB) I-V

**25. Other identification (numbers) associated
with the accession (OTHERNUMB) I-V**

4. Genetic group

**21. Ancestral data (ANCEST) III-IV
and some genetic information V**



Selection accessions that have been **collected**
where they are **being conserved**.

Taxonomical information have to be corrected

National geographical information

Country of origin (ORIGCTY) – RUSSIAN FEDERATION

Donor country (DONORCODE) – RUSSIAN FEDERATION

Numeric information

Collecting number (COLLNUMB) – preferably filled

Acquisition date (ACQDATE)  same dates (year)
Collecting date of sample (COLLDATE) 

Donor accession number (DONORNUMB)  have to be empty
Other identifications (numbers) (OTHERNUMB) 



Wild populations of national origin

CATNUM	SPECIES	DONORNAME	ORICOUN	DONORCOUN	DONORG	DONNAM
26	A.fatua L.		Russian Federation	Russian Federation	collect	A.I.Maltzev
28	A.fatua L.		Mongolia	Mongolia	expedition	V.E.Pisarev
29	A.fatua L.		Russian Federation	Russian Federation	expedition	Frenkel
30	A.fatua L.		Russian Federation	Russian Federation	expedition	Frenkel
32	A.fatua L.		Tadjikistan	Tadjikistan	expedition	
37	A.fatua L.		Russian Federation	Russian Federation	expedition	V.F.Antropova
45	A.fatua L.		Georgia	Georgia	expedition	N.I.Vavilov
53	A.fatua L.		Russian Federation	Russian Federation	expedition	F.Kh.Bakhteev
55	A.fatua L.		Russian Federation	Russian Federation	expedition	N.I.Vavilov
69	A.fatua L.		Argentine	Argentine	expedition	N.I.Vavilov
72	A.fatua L.		Azerbaijan	Azerbaijan	expedition	A.P.Ivanova
77	A.fatua L.		Chine	Chine	expedition	A.M.Gorski
85	A.fatua L.		Russian Federation	Russian Federation	collect	



Selection unique accessions that have been **collected**
in European countries.

Taxonomical information have to be corrected

Geographical information

Country of origin (ORIGCTY) – European countries

Donor country (DONORCODE) – European countries

Numeric information

Collecting number (COLLNUMB) – preferably filled

Acquisition date (ACQDATE)  same dates (year)
Collecting date of sample (COLLDATE) 

Donor accession number (DONORNUMB)  have to be empty
Other identification (numbers) (OTHERNUMB) 



Wild populations

CATNUM	SPECIES	DONORNAM	ORICOUN	DONORCOUN	DONORG	DONNAM
1	<i>A.vaviloviana</i>		Spain	Spain	expedition	N.I.Vavilov
6	<i>A.barbata</i> Pott.		France	France	expedition	N.I.Vavilov
14	<i>A.sterilis</i> L.		Italy	Italy	expedition	N.I.Vavilov
15	<i>A.sterilis</i> L.		Turkey	Turkey	expedition	P.M.Zhukovski
18	<i>A.ludoviciana</i> Dur.		Switzerland	Switzerland	collect	
19	<i>A.ludoviciana</i> Dur.		Bulgaria	Bulgaria	SARI., Sofia	
25	<i>A.fatua</i> L.		Poland	Poland	collect	A.I.Maltzev
45	<i>A.fatua</i> L.		Georgia	Georgia	expedition	N.I.Vavilov
48	<i>A.fatua</i> L.		Armenia	Armenia	expedition	N.I.Vavilov
56	<i>A.fatua</i> L.		Turkey	Turkey	expedition	P.M.Zhukovski
70	<i>A.fatua</i> L.		France	France	expedition	P.M.Zhukovski
97	<i>A.fatua</i> L.		Czekhoslovakia	Czekhoslovakia	collect	A.Ya.Trofimovskaya
129	<i>A.sterilis</i> L.	Ave 0245	Greece	Germany		
292	<i>A.canariensis</i>	CA 42	Spain	Canada	PGRC, Ottawa	
293	<i>A.canariensis</i>	CA 70	Spain	Canada	PGRC, Ottawa	
1591	<i>A.sterilis</i> L.	CAV 3301	Greece	Canada	PGRC, Ottawa	B.R.Baum



Selection accessions that have been **collected
in non-European countries.**

Taxonomical information have to be corrected

Geographical information

Country of origin (ORIGCTY) – non-European countries

Donor country (DONORCODE) – non-European countries

Numeric information

Collecting number (COLLNUMB) – preferably filled

Acquisition date (ACQDATE)

Collecting date of sample (COLLDATE)

same dates (year)

Donor accession number (DONORNUMB)

Other identification (numbers) (OTHERNUMB)

have to be empty



Wild populations

CATNUM	SPECIES	DONORNAM	ORICOUN	DONORCOUN	DONORG	DONNAM
2	<i>A.hirtula</i> Lag.		Palestine	Palestine	expedition	A.I.Maltzev
3	<i>A.hirtula</i> Lag.		Morocco	Morocco	expedition	N.I.Vavilov
5	<i>A.barbata</i> Pott.		Iran	Iran	expedition	N.I.Vavilov
9	<i>A.barbata</i> Pott.		Ethiopia	Ethiopia	expedition	N.I.Vavilov
17	<i>A.sterilis</i> L.		Chine	Chine	collect	
21	<i>A.ludoviciana</i> Dur.		Azerbaijan	Azerbaijan	expedition	A.I.Mordvinkina
28	<i>A.fatua</i> L.		Mongolia	Mongolia	expedition	V.E.Pisarev
31	<i>A.fatua</i> L.		Kazakhstan	Kazakhstan	collect	
32	<i>A.fatua</i> L.		Tadjikistan	Tadjikistan	expedition	
69	<i>A.fatua</i> L.		Argentine	Argentine	expedition	N.I.Vavilov
77	<i>A.fatua</i> L.		Chine	Chine	expedition	A.M.Gorski
94	<i>A.wiestii</i> Steud.	An 109	Egypt	Great Britain	Newcalstle	Dr.H.W.Holden
95	<i>A.wiestii</i> Steud.	An 122	Israel	Great Britain	Newcalstle	Dr.H.W.Holden
96	<i>A.wiestii</i> Steud.	An 124	Israel	Great Britain	Newcalstle	Dr.H.W.Holden
161	<i>A.magna</i> Murph.	C.I. 8330	Morocco	USA	NSGC	
163	<i>A.sterilis</i> L.	C.I. 8334	Israel	USA	NSGC	
165	<i>A.ludoviciana</i> Dur.	C.I. 8321	Israel	USA	NSGC	



Selection accessions that have been **collected or bred** where they are **being conserved**.

Taxonomical information have to be corrected

National geographical information

Country of origin (ORIGCTY) – RUSSIAN FEDERATION

Donor country (DONORCODE) – RUSSIAN FEDERATION

Numeric information

Collecting number (COLLNUMB) – preferably for landraces

Accession name (ACCENAME) – has to be unique

Collecting date of sample (COLLDATE) - preferably for landraces

Donor accession number (DONORNUMB)

Other identifications (numbers) (OTHERNUMB)

have to be empty



National landraces (local) National obsolete improved varieties

ACCENUM	ORIGCTY	DONCOUN	SCINAM	ACCENAM	COLLNUM	COLLDAT	ACQD
2412	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.BRUNNEA	LOCAL	83B/40	1920	1920
2414	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.MUTICA	LOCAL	84/45	1920	1920
2417	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.AUREA	LOCAL	94/32	1920	1920
2423	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.AUREA	LOCAL	112/43	1920	1920
2429	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.BRUNNEA	LOCAL	163/40	1920	1920
2433	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.AUREA	LOCAL	171/26	1920	1920
2434	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.GRISEA	LOCAL	315/34	1930	1920
2440	CANADA (CAN)	CANADA (CAN)	A.SATIVA L. VAR.MUTICA	LOCAL	332/40	1920	1920
2447	UNITED STATES	UNITED STATES	A.SATIVA L. VAR.MUTICA	LOCAL	371/29	1920	1920
2449	MONGOLIA (MNG)	MONGOLIA (MNG)	A.SATIVA L. VAR.AUREA	LOCAL	376/26	1920	1920
2450	MONGOLIA (MNG)	MONGOLIA (MNG)	A.SATIVA L. VAR.AUREA	LOCAL	376/36	1920	1920
2458	KRASNOYARSK	RUSSIA (RUS)	A.SATIVA L. VAR.AUREA	LOCAL	381/1	1920	1920
2459	IRKUTSK (RUS)	RUSSIA (RUS)	A.SATIVA L. VAR.MUTICA	LOCAL	381/3	1920	1920
2469	MONGOLIA (MNG)	MONGOLIA (MNG)	A.SATIVA L. VAR.AUREA	LOCAL	24	1921	1921
2471	MONGOLIA (MNG)	MONGOLIA (MNG)	A.SATIVA L. VAR.INERMIS	LOCAL	26	1921	1921



Selection unique accessions that have been **collected or bred in European countries.**

Taxonomical information have to be corrected

National geographical information

Country of origin (ORIGCTY) – European countries

Donor country (DONORCODE) – European countries

Numeric information

Collecting number (COLLNUMB) – preferably for landraces

Accession name (ACCENAME) – has to be unique for varieties

Collecting date of sample (COLLDATE) - preferably for landraces

Donor accession number (DONORNUMB)

Other identifications (numbers) (OTHERNUMB)

have to be empty



European landraces (local) European obsolete improved varieties

ACCENUM	ORIGCTY	DONCOUN	DONNAME	SCINAM	ACCENAME	COLLNUM	COLLDAT	ACQD.
5132	ITALY	ITALY	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
5162	GEORGIA	GEORGIA		A.SATIVA L.	LOCAL	27	1926	1926
5163	GERMANY	GERMANY	VAVILOV N.I.	A.SATIVA L.	LOCAL		1927	1927
5166	SPAIN	SPAIN	VAVILOV N.I.	A.SATIVA L.	LOCAL		1927	1927
5167	SPAIN	SPAIN	VAVILOV N.I.	A.BYZANTINA	LOCAL		1927	1927
5216	SPAIN	SPAIN	VAVILOV N.I.	A.STRIGOSA	LOCAL		1927	1927
5264	PORTUGAL	PORTUGAL	VAVILOV N.I.	A.BYZANTINA	LOCAL	5490	1927	1927
5310	PORTUGAL	PORTUGAL	VAVILOV N.I.	A.SATIVA L.	LOCAL	5419	1927	1927
5318	PORTUGAL	PORTUGAL	VAVILOV N.I.	A.STRIGOSA	LOCAL	5636	1927	1927
5336	FRANCE	FRANCE	VAVILOV N.I.	A.BYZANTINA	LOCAL		1927	1927
5338	FRANCE	FRANCE	VAVILOV N.I.	A.SATIVA L.	LOCAL		1927	1927
8299	SWEDEN	SWEDEN		A.SATIVA L.	OATS VICTORY			1935
8300	SWEDEN	SWEDEN		A.SATIVA L.	OATS ENGELBREST2			1935
8482	POLAND	POLAND		A.SATIVA L.	JOLTY MAZUR			1936
8485	POLAND	POLAND		A.SATIVA L.	TEODOSJA			1936



Selection accessions that have been **collected or bred in non-European countries**.

Taxonomical information have to be corrected

National geographical information

Country of origin (ORIGCTY) – non-European countries

Donor country (DONORCODE) – non-European countries

Numeric information

Collecting number (COLLNUMB) – preferably for landraces

Accession name (ACCENAME) – has to be unique for varieties

Collecting date of sample (COLLDATE) - preferably for landraces

Donor accession number (DONORNUMB)

Other identifications (numbers) (OTHERNUMB)

have to be empty



Non-European landraces (local) Non-European obsolete improved varieties

CCENUM	ORIGCTY	DONCOUN	DONNAME	SCINAM	ACCENAM	COLLNUM	COLLDAT	ACQDA
2469	MONGOLIA	MONGOLIA	PISAREV V.E.	A.SATIVA L.	LOCAL	24	1921	1921
2472	MONGOLIA	MONGOLIA	PISAREV V.E.	A.SATIVA L.	LOCAL	29	1921	1921
2490	MONGOLIA	MONGOLIA	PISAREV V.E.	A.SATIVA L.	LOCAL	82	1921	1921
4756	ALGERIA	ALGERIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4761	ALGERIA	ALGERIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4765	TUNISIA	TUNISIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4768	ALGERIA	ALGERIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4769	MOROCCO	MOROCCO	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4774	TUNISIA	TUNISIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4775	ALGERIA	ALGERIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926
4777	TUNISIA	TUNISIA	VAVILOV N.I.	A.SATIVA L.	AVOINE JAUNE SAHA		1926	1926
4778	TUNISIA	TUNISIA	VAVILOV N.I.	A.SATIVA L.	AVOINE KELSALL'S 92		1926	1926
4779	TUNISIA	TUNISIA	VAVILOV N.I.	A.BYZANTINA	AVOINE LACHLAN 95		1926	1926
4782	SYRIA	SYRIA	VAVILOV N.I.	A.BYZANTINA	LAVAPETI LOCALE		1926	1926
4785	SYRIA	SYRIA	VAVILOV N.I.	A.BYZANTINA	LOCAL		1926	1926



Selection accessions that have been **bred**
where they are **being conserved**.

Taxonomical information have to be corrected

National geographical information

Country of origin (ORIGCTY) – RUSSIAN FEDERATION

Donor country (DONORCODE) – RUSSIAN FEDERATION

Numeric information

Accession name (ACCENAME) – has to be unique

Donor accession number (DONORNUMB)
Other identifications (numbers) (OTHERNUMB) } have to be empty

Genetic group

Ancestral data (ANCEST) - preferably filled



National advanced improved varieties

ACCENUM	ORIGCTY	SCINAM	ACCENAME	ANCEST
11122	TOMSK (RUS)	A.SATIVA L. VAR.MUTICA	NARYMSKII 943	Selection from VIR10247
11348	GERMANY	A.SATIVA L. VAR.AUREA	FLAMINGSKRONE	Mesdag/Borriesa//Fla...
12104	OMSK (RUS)	A.SATIVA L. VAR.MUTICA	IRTYSH	Selection from CLINTAFE
12142	GREAT BRITAIN	A.SATIVA L. VAR.ARISTATA	MARIS TITAN	CC 4146-4 / CONDOR
12560	OMSK (RUS)	A.SATIVA L. VAR.MUTICA	OMSKII 77	GRAIGS AFTERLEA X OP..
15071	NETHERLANDS	A.SATIVA L. VAR.MUTICA	CELSIA	Leanda / Selma // Dula
15072	SWEDEN (SWE)	A.SATIVA L. VAR.MUTICA	BIRGITTA	
15074	GERMANY (DEU)	A.SATIVA L. VAR.MUTICA	ARAGON	
15062	OMSK (RUS)	A.SATIVA L. VAR.MUTICA	SIBIRSKII KORMOVOI	Selection from local var.
15063	OMSK (RUS)	A.SATIVA L. VAR.INERMIS	SIBIRSKII GOLOZERNYI	Selection from local var.
15064	PETERSBURG	A.SATIVA L. VAR.MUTICA	SULTAN	Peragold / Borrinova
15065	OMSK (RUS)	A.SATIVA L. VAR.MUTICA	IRTYSH 22	Flamingsvita / Selma
15012	TOMSK (RUS)	A.SATIVA L. VAR.MUTICA	TOGURCHANIN	Perona / Selma
15013	ALTAY (RUS)	A.SATIVA L. VAR.ARISTATA	ARGUMENT	Altai 1 / Harmon
15014	KEMEROVO (RUS)	A.SATIVA L. VAR.INERMIS	LEVSHA	Selection from Tibor



Selection accessions that have been **bred**
where they are **being conserved**.

Taxonomical information is not so important

National geographical information

Country of origin (ORIGCTY) – RUSSIAN FEDERATION

Donor country (DONORCODE) – RUSSIAN FEDERATION

Numeric information

Accession name (ACCENAME) – has to be unique

Accession number (ACCENUMB) - has to be unique

Donor accession number (DONORNUMB) have to be empty

Other identifications (numbers) (OTHERNUMB)

Genetic group

Ancestral data (ANCEST) and genetic information - preferably filled



National breeding/research materials/genetic stocks

ACCENUM	ORIGCTY	SCINAM	ACCENAME	ANCEST	GEN
12453	KIROV (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	FALENSKII X MAGISTRAL	
12456	KIROV (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	GIGANT BOGEMSK.X F...	
12459	KIROV (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	(II-48-207 X FALENSKI...	
12462	KIROV (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	FALENSKII 1 X VIGOR	
12551	KURSK (RUS)	A.SATIVA L. VAR.AUREA	HYBRID	67-82 NADEZHNYI X 5536	
12552	KURSK (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	7469 62-123 X 62-75	
12554	KURSK (RUS)	A.SATIVA L. VAR.MUTICA	HYBRID	109-71 L-1026 X SHILD	
13261	YEKATERINBURG	A.SATIVA L. VAR.MUTICA	MUTANT	MUTANT...	
13269	YEKATERINBURG	A.SATIVA L. VAR.MUTICA	MUTANT	MUTANT...	
13326	UNITED STATES	A.SATIVA L. VAR.MUTICA	MULTILINE E-73	RECUR PARENT C.I. 8044	
13328	UNITED STATES	A.SATIVA L. VAR.MUTICA	MULTILINE E-77	RECUR PARENT C.I. 8044	
13329	UNITED STATES	A.SATIVA L. VAR.MUTICA	MULTILINE E-74	RECUR PARENT C.I. 8044	
15118	PETERSBURG (RUS)	A.SATIVA L. VAR.MUTICA	KHANOMI 2	VIR-14324 X OMIHI	Dw-6
14858	PETERSBURG (RUS)	A.SATIVA L. VAR.MUTICA	BOROT	BORRUS X OT 207	Dw-6
14862	PETERSBURG (RUS)	A.SATIVA L. VAR.MUTICA	SOKU	SOVETSKII X K-14176	Dw-6
14909	PETERSBURG (RUS)	A.SATIVA L. VAR.MUTICA	SONA	SOVETSKII x Echidna	Dw-6
13327	UNITED STATES	A.SATIVA L. VAR.AUREA	MULTILINE E-73 A	RECUR PARENT C.I. 8044	



N.I. Vavilov Research Institute of
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**Thank you for
your attention**