



CURRENT SITUATION OF *TRITICUM* CLASSIFICATION IN THE COLLECTION OF THE NATIONAL GENE BANK OF BULGARIA

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Table 1: Number of accessions from Triticum registered according to taxonomic classifications of Dorofeev et al. and Mac Key

Taxonomy classifications	Number of accessions	%
Dorofeev et al.	11536	99,73
Mac Keys	8	0,07
Synonyms	23	0,20

TOTAL: 11 567 accessions



Table 2: Number of accessions from 25 species according to taxonomic classification **of Dorofeev et al., 1979**

Nº	Species	Number of accessions	Number of accession with subtaxa
1	<i>Triticum aestivum</i> L.	8 872	2345
2	<i>Triticum durum</i> Desf.	1 998	559
3	<i>Triticum sphaerococcum</i> Percival	176	107
4	<i>Triticum monococcum</i> L.	101	82
5	<i>Triticum boeoticum</i> Boiss.	100	17
6	<i>Triticum turgidum</i> L.	69	62
7	<i>Triticum dicoccon</i> (Schrank) Schübl.	66	50
8	<i>Triticum spelta</i> L.	56	35
9	<i>Triticum timopheevi</i> (Zhuk.) Zhuk.	20	8
10	<i>Triticum dicoccoides</i> (Körn. ex Asch. & Graebn.) Schweinf.	16	11
11	<i>Triticum macha</i> Dekapr. et Menambde	11	5
12	<i>Triticum polonicum</i> L.	11	9
13	<i>Triticum compactum</i> Host.	10	6
14	<i>Triticum carthilicum</i> Nevski	7	4
15	<i>Triticum urartu</i> Thum.ex Gandil.	5	0
16	<i>Triticum turanicum</i> Jakubz.	4	2
17	<i>Triticum aethiopicum</i> Jakubz.	3	2
18	<i>Triticum araraticum</i> Jakubz.	3	1
19	<i>Triticum vavilovii</i> Jakubz.	3	0
20	<i>Triticum zhukovskyi</i> Menabde & Ericzjan	3	0
21	<i>Triticum ispaghanicum</i> Heslot	2	0
22	<i>Triticum karamyshevii</i> Nevski	2	0
23	<i>Triticum kiharae</i> Dorof. et Migush.	1	0
24	<i>Triticum militinae</i> Zhuk. et Migush.	1	0
25	<i>Triticum petropavlovskii</i> Udachin & Migush.	1	0
Total		11 541	3 305 (28,64%)

Table 3: Botanical varieties in *Triticum aestivum* L.

Subtaxa	Number of accessions	%
unknown	6527	73,57
var. <i>lutescens</i>	1187	13,38
var. <i>erythrosperrum</i>	536	6,04
var. <i>milturum</i>	157	1,77
var. <i>ferrugineum</i>	140	1,58
var. <i>graecum</i>	68	0,77
var. <i>albidum</i>	53	0,60
var. <i>aestivum</i>	45	0,51
var. <i>aureum</i>	27	0,30
var. <i>alborubrumcompactoides</i>	24	0,27
var. <i>velutinum</i>	21	0,24
var. <i>villosum</i>	14	0,16
var. <i>hostianum</i>	13	0,15
var. <i>erythroleucum</i>	10	0,11
var. <i>lutescens-compactoides</i>	10	0,11
other varieties	40	0,45

Total: 32 varieties, 8 872 accessions



var. lutescens (Alef.) Mansf.



var. milturum (Alef.) Mansf.



var. erythrosperrum Koern.

Table 4: Botanical varieties in *Triticum durum* Desf.

Subtaxa	Number of accessions	%
unknown	1439	72,02
var. hordeiforme	214	10,71
var. leucurum	112	5,61
var. melanopus	29	1,45
var. leucomelan	22	1,10
var. apulicum	20	1,00
var. erythromelan	20	1,00
var. murciense	19	0,95
var. affine	18	0,90
var. reichenbachii	13	0,65
var. provinciale	12	0,60
var. africanum	10	0,50
var. valenciae	10	0,50
var. coerulescens	8	0,40
other varieties	52	2,60



var. apulicum Koern.

Total: 34 varieties, 1 998 accessions

Table 5: Botanical varieties in *Triticum dicoccon* (Schrank) Schübl.

Subtaxa	Number of accessions	%
unknown	16	24,24
var. farrum	11	16,67
var. pycnurum	6	9,09
var. volgense	3	4,55
var. rufum	3	4,55
var. tricoccum	2	3,03
var. haussknechtianum	2	3,03
var. fictesemicanum	2	3,03
var. compactomiegei	2	3,03
var. arras	2	3,03
other varieties	17	25,73



var. farrum Flaksb.



var. rufum Schuebl.



var. tricoccum Koern.

Total: 15 varieties, 66 accessions



Table 6: Botanical varieties in *Triticum monococcum* L.

Subtaxa	Number of accessions	%
unknown	52	52,48
var. vulgare	11	10,89
var. flavescens	9	8,91
var. hohensteinii	7	6,93
var. macedonicum	7	6,93
var. laetissimum	4	3,96
var. eincorn	3	2,97
var. sofianum	3	2,97
var. atriaristatum	1	0,99
var. eredvianum	1	0,99
var. monococcum	1	0,99
var. nigricultum	2	1,98

Total: 11 varieties, 101 accessions



Table 7: Botanical varieties in *Triticum spelta* L.

Subtaxa	Number of accessions	%
unknown	22	36,84
var. duhamelianum	12	21,05
var. rubrivelutinum	7	12,28
var. album	5	8,77
var. arduini	3	5,26
var. alefeldii	2	3,51
var. albivelutinum	2	3,51
var. alboamissum	1	1,75
var. asialbispicatum	1	1,75
var. caeruleum	1	1,75
var. ramososchenkii	1	1,75



Triticum spelta L. var. album



Triticum spelta L. var. arduini



Triticum spelta L. var. duhalemianum

Total: 10 varieties, 56 accessions

Table 8: Twenty three accessions noted with synonyms

Synonyms (Illegimate)	Number of accessio n	Plants of the world online (http://powo.science.kew.org/) Accepted	Plant list (http://www.theplantlist.org/) Accepted
<i>Triticum aegilopoides</i> (Link) Balansa ex Körn.	1	<i>Triticum monococcum subsp. aegilopoides</i> (Link) Thell.	<i>Triticum boeoticum</i> Boiss.
<i>Triticum crassum</i> (Boiss.) Aitch. & Hemsl.	1	<i>Aegilops crassa</i> Boiss. ex Hohen.	<i>Aegilops crassa</i> Boiss.
<i>Triticum georgicum</i> (Flaksb.) Dekapr.	1	<i>Triticum turgidum subsp. georgicum</i> (Dekapr & Menabde) Mackey ex Hanelt	<i>Triticum turgidum</i> L.
<i>Triticum ligusticum</i> (Savign.) Bertol.	1	<i>Aegilops speltoides subsp. ligustica</i> (Savign.) Zhuk.	<i>Aegilops speltoides subsp. ligustica</i> (Savign.) Zhuk.
<i>Triticum ovatum</i> (L.) Raspail	1	<i>Aegilops neglecta</i> Req. ex Bertol.	<i>Aegilops neglecta</i> Req. ex Bertol.
<i>Triticum palaecolchicum</i> Menabde	3	<i>Triticum turgidum subsp. georgicum</i> (Dekapr & Menabde) Mackey ex Hanelt	<i>Triticum dicocon</i> (Schrank) Schübl.
<i>Triticum persicum</i> (Boiss.) Aiton & Hemsl.	1	<i>Aegilops triuncialis</i> L.	<i>Aegilops triuncialis</i> L.
<i>Triticum subcompactum</i>	1		
<i>Triticum tauschii</i> (Coss.) Schmalh.	2	<i>Aegilops tauschii</i> Coss.	<i>Aegilops tauschii</i> Coss.
<i>Triticum thaouidar</i> Reut. ex Hausskn.	3		<i>Triticum boeoticum</i> Boiss.
<i>Triticum timonovum</i> Heslot & Ferrary	1	<i>Triticum timopheevii subsp. timopheevii</i>	<i>Triticum timopheevii</i> (Zhuk.) Zhuk.
<i>Triticum × timococcum</i> Kostov	1	<i>Triticum × zhukovskyi</i> Menabde & Erizin	<i>Triticum × timococcum</i> Kostov
<i>Triticum tritordeum</i>	3		
<i>Triticum triunciale</i> (L.) Raspail	2	<i>Aegilops triuncialis</i> L.	<i>Aegilops triuncialis</i> L.
<i>Triticum umbellulatum</i> (Zhuk.) Bowden	1	<i>Aegilops umbellulata</i> Zhuk.	<i>Aegilops umbellulata</i> Zhuk.


The main problems on identification of botanical varieties:

- Lack of taxonomy specialist;
- Lack of training courses for young curators;
- Lack of standardization in use of taxonomic nomenclature.

-we relying on the donor's information;

-the available information in the Internet which is sometimes confusing;

- to comparing materials with other accessions maintain in the genebank



Thank you for your attention!

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