

COLLECTION OF ONION- AND LEEK- GENOTYPES
IN THE NETHERLANDS

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INSTITUUT VOOR DE VEREDELING VAN TUINBOUWGEWASSEN

WAGENINGEN

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1. INTRODUCTION

An International Allium Gene Bank has been founded by writing and publishing, in 1982, of the IBGPGR Status Report: 'Genetic Resources of Allium Species', written by D. Astley (NVRS, Wellesbourne, VK) N.L. Innes (idem) and Q.P. van der Meer (IVT, Wageningen, the Netherlands).

The collection of Allium in the Netherlands was financed, as a consulting job, by the European Cooperative Program (ECP). This collection was built up during 1982 (October, November, December) and 1983 (January). Ing. J.L. van Bennekom was responsible for the execution of the job.

2. COLLECTION IN THE NETHERLANDS

Before starting the actual job it was decided that both old and current varieties of onions and leeks would be collected. Current varieties are collected because in the Netherlands replacement of onion and leekvarieties is a fast going process. An extra argument for their collection is their indispensability for determining the progress made by new varieties in the future. The best determination of such progress seems to be the comparison of old and current top varieties in one field trial.

Collection was mainly done by contacting Seed Firms. The action was announced by sending a letter informing people of the founding of an International Allium Gene Bank and inviting their cooperation (Annex I).

About 10 days were spent visiting the Firms, as enlisted in Annex II, column 1. These addresses were contacted by telephone and an appointment was made for a visit some days or weeks later on. Mostly the seed samples had already been prepared in advance. So the most

important job was to meet the person in charge of onion and/or leek breeding and to ask him the questions in respect of collection data as given in the Allium Resources Report (pages 26-28). Some extra questions cropping up during collection were added in handwriting. The questions to be answered during the visit were indicated by a dot (Annex III).

After collection of the samples from the Seed Firms a number of samples were taken from the IVT working collection of onions and leeks.

Finally the seed catalogues of the visited Firms were screened for varieties possibly skipped during the collection visits.

A special point is the avoidance of doubles and of other accessions of insufficient value for the gene bank. To this end a card-index was composed. This was sufficient for Rijnsburger strains but not for entries of more or less foreign varieties as Stuttgarter, Wolska and Zittauer. In respect of these varieties the information (about their origin) from the Seed Firms is important, but in addition verification (see paragraph 8) is of essential value.

3. RESULTS OF COLLECTION

Information on the collected samples is given in Annex II:

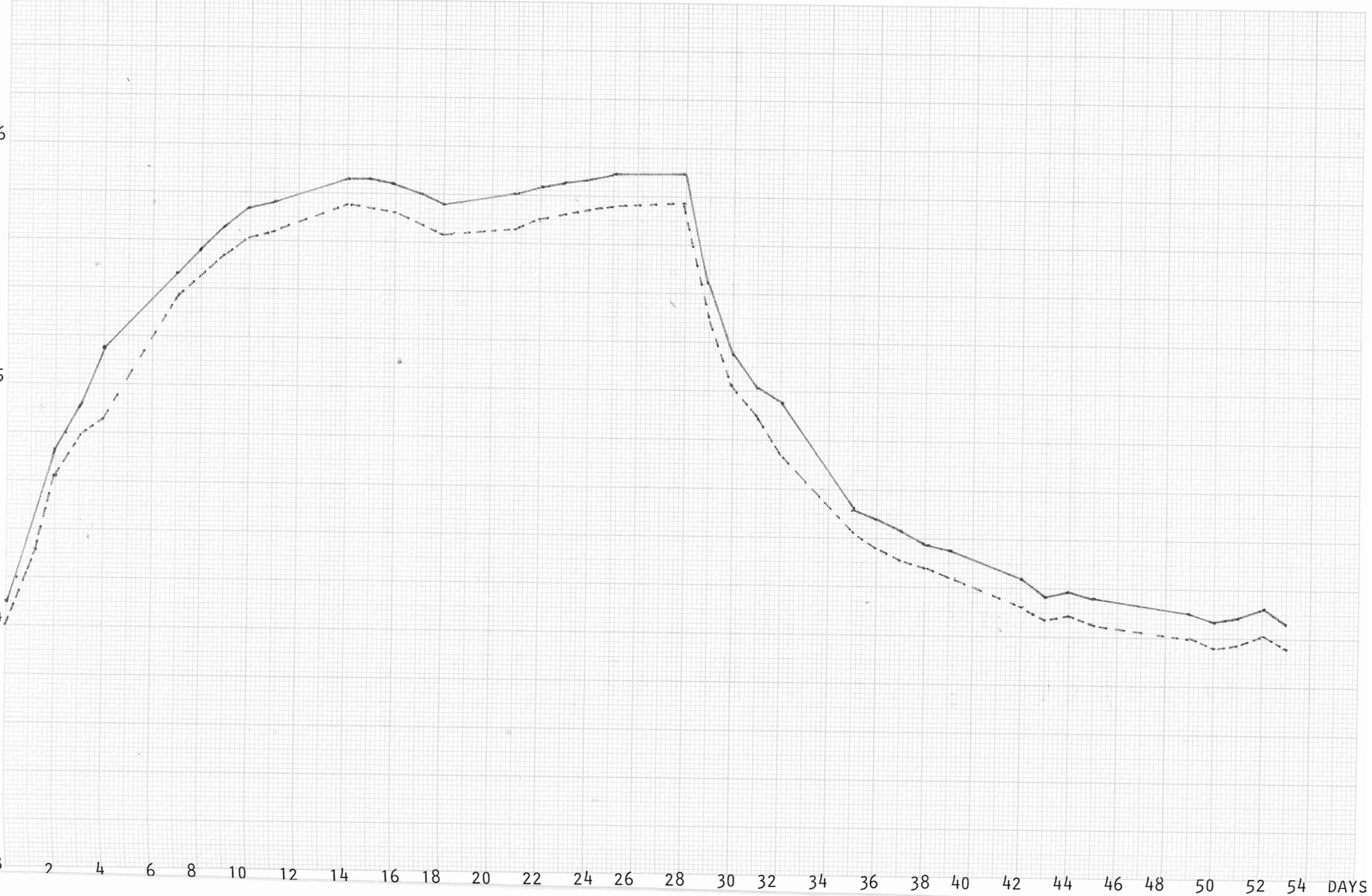
- Donors
- Names: column 2
- Origins: column 3
- Weights: column 4

4. PRELIMINARY STORAGE

The samples were placed at a temperature of about 15°C and a relative humidity of about 15% as soon as possible after collection. To learn the required time period for adaptation to these environmental conditions the following trial was made:

Seed samples of about 50 g each were put into standard cups (upper diameter: 7 cm; bottom diameter: 4,5 cm; height: 8,5 cm) and adapted to room conditions (temperatures between 10 and 20°C; relative humidities between 50 and 70%), whereupon they were placed under preliminary storage conditions. Adaptation to these conditions needed about 4 weeks (fig. 1). Therefore all seed samples were kept in preliminary storage during at least 4 weeks. Seed samples of insufficient weight and (or) insufficient germination percentage (paragraph

RAMS
2 samples
Fig.1 Changes in weight of onion seed after replacement from 15% r.h. to room conditions and (after 28 days) back to 15% r.h.



6.1) are kept at these conditions until their multiplication.

5. DETERMINATION OF THE GERMINATION PERCENTAGE

This determination was done on 2 x 50 seeds following the ISTA instructions. The results are given in Annex II, column 5.

6. PRELIMINARY ACCESSION TO THE GENE BANK

6.1. Criteria for weight and germination capacity

Arbitrary decisions were made in respect of these criteria:

- 45 grams is considered as the ideal quantity and 30 grams as the minimum quantity for accession.
- The minimum germination percentage for accession was fixed on 50.

6.2. Accession data

Accession data forms in respect of seed samples being considered for preliminary accession were completed as far as possible. Also to these forms (see Genetic Resources of Allium species pages 25-26) some relevant questions were added in handwriting (Annex III). At the same time the standard collection forms designed by the IBPGR were completed (Annex IV). These forms could be enclosed to demanded seed samples.

6.3. Definitive storage

As pointed out before preliminary accession to the gene bank was proceeded by checks in respect of the following aspects:

- Doubles.
- Seed quantity.
- Germination percentage.
- Justification.

After these checks the preliminary accession started actually by sealing the seed samples in tinfoil bags, whereupon the bags were stored at -20°C.

The preliminary accessions were indicated on the central list given in Annex II (column 6).

7. DUPLICATES

As many duplicates as possible were reserved for the NVRS at Wellesbourne. If not enough seed was available only a multiplication

sample was taken. (Annex II, column 7).

8. VERIFICATION

In order to correct possible mistakes a final verification is done by sowing seed samples (2 g) of the preliminary accession in a field trial in 1983. Onion specialists will inspect this material for correspondence between names and varieties.

9. DEFINITIVE ACCESSION

The samples which have stood the verification phase will receive the definitive accession status by an indication on the central list (Annex II, column 8).

10. IVT ALLIUM GENE BANK LISTS

A computer list, per Allium species of the definitive accessions will be composed. These lists will be indicated as the IVT Allium Gene Bank Lists. In these lists essential characters will be indicated, such as: dry matter, disease resistance, day length requirement etc.

The lists will be available on request.

11. RESTRICTED RELEASE OF SEED SAMPLES

Seed samples (in general less than 1 g) will only be released to persons and institutions who have strong arguments for the utilization of the samples and who are willing to present their results to the Gene Bank for incorporation in the Gene Bank List.

Somewhat larger quantities (10 - 20 g) will be available for variety trials comparing old and current top varieties. (Of some top varieties samples of about 1 kg have been collected).

12. MULTIPLICATION CRITERIA

Multiplication, using at least 50 plants, will be realized as soon the seed quantity is 10 g or less and/or the germination percentage is 40 or less. When the seed quantity is 5 g or less and/or the germination percentage is 30 or less the release of such material is discontinued.

Request to Dutch breeding and selection firms to collaborate in the building up of an international Allium gene collection.

Under the auspices of the International Board for Plant Genetic Resources (IBPGR), during the past years an international gene bank has been set up for cultivated species of the genus Allium (notably leek and onion) and closely related species.

The IBPGR proposes to have the following institutions function as main establishments in Europe:

- The National Vegetable Research Station (NVRS) at Wellesbourne, England
- The IVT at Wageningen

The material obtained will be freely available, with due observance of the rules to be set for this. Exact rules are not yet in force for that matter. We feel that the making of concrete proposals to this end is clearly a task for the IBPGR.

By the European Cooperative Program (ECP) a subsidy has been made available for collection in the Netherlands within the scope of a consulting job.

We plan to realise this activity in the last quarter of 1982.

In the first instance we should like to keep half (preferably ca. 50 g) of the collected seed samples in Wageningen and send the other half to Wellesbourne.

With a view to the above we kindly request you to supply, if possible, 100 g of seed of leek and onion varieties and selections available at your Station. Smaller amounts would also be very welcome. In a few weeks we would like to contact you in order to make an appointment for a visit during which we could collect the material made available by you.

We hope the procedure in the Netherlands can serve as a model for the next step, i.e. the collection in other European countries.

A great many colleagues have already been asked to cooperate.

Your cooperation would also be greatly appreciated.

With kind regards,

Yours sincerely,

Q.P. van der Meer

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name (Seedfirm)	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
<u>A. cepa</u>							grams	
1	Bejo	Krano	NLD	40	91	+	5	
2	"	Hygro C-line	"	40	98	+	5	
3	"	Augusta	"	40	79	+	5	
4	"	Robusta	"	40	89	+	5	
5	"	Balstora	"	40	79	+	5	
6	"	Hydure F1 hybride	"	40	50	+	5	
7	"	Hygro F1 hybride	"	40	88	+	5	
8	"	Hyton F1 hybride	"	40	65	+	5	
11	"	Sochaczewska = Wolska strain	Pol	50	85	+	42	
12	"	Danilowskii	"	49	80	+	43	
13	"	Stuttgarter "Zefa"	CHE	40	99	+	15	
14	"	Vertus	FRA	50	90	+	45	
15	"	Eterna	NLD	50	84	+	45	
16	"	Plastro	"	40	94	+	5	
17	"	Copra F1 hybride	USA	50	95	+	45	
18	"	Hyper F1 hybride	NLD	50	82	+	50	
19	"	Barletta	ITA	70	78	+	50	
20	"	Senshue. Yellow	JPN	70	94	+	47	
21	"	Imai Early Yellow	"	68	75	+	47	
22	"	Rocardo	NLD	40	90	+	5	
23	"	Noro (N.H.Blood Red)	"	40	84	+	5	
24	"	Rijnsburger Flat A-line	"	40	93	+	6	
25	"	Auxonne	FRA	40	74	+	5	
26	"	Avanti	JPN	40	94	+	5	
28	"	Gelbe Wiener	NLD	40	90	+	5	
29	"	Stuart = Stuttgarter strain	"	40	81	+	5	
31	"	Zwijndrechtse Poot	"	40	72	+	5	
33	Sluis en Groot	Yellow Ebenezer	USA	50	84	+	50	
34	"	Gustado	NLD	50	74	+	45	
35	"	Dorata di Parma	ITA	50	85	+	50	
36	"	Stuttgarter	DEU	50	71	+	45	
37	"	Sturon = Stuttgarter strain	NLD	50	95	+	45	
38	"	America = Early Yellow Globe	USA	50	83	+	45	
39	"	Texas Early Grano P.R.R.	"	50	67	+	47	
40	"	Texas Early Grano	"	50	77	+	47	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
42	Sluis en Groot	Wijbo	NLD	50	69	+	46	
43	"	Jumbo	"	50	68	+	45	
44	"	Karbo	"	50	50	+	45	
46	"	Wijdehoud	"	50	66	+	46	
47	"	Zwijndrechtse Pootui	"	50	80	+	46	
49	"	Robal = Round red	"	55	53	+	45	
50	"	Barletta	ITA	50	62	+	45	
51	"	White Ebenezer	USA	50	85	+	45	
52	"	Pompeï	ITA	50	73	+	46	
54	"	Hysol	USA	50	75	+	46	
55	"	Winter over	"	50	91	+	45	
56	Pop Vriend	Bolstar	NLD	65	96	+	50	
57	"	Vribol	"	70	78	+	65	
58	"	Stuttgarter P.V.	DEU	60	83	+	46	
59	Royal Sluis	Lucrato	NLD	50	95	+	46	
60	"	Rivato	"	50	94	+	46	
61	"	Solidor = Wolska strain	POL	55	92	+	46	
62	"	Stuttgarter	NLD	50	92	+	46	
63	"	Zittauer	DEU	50	61	+	40	
64	"	Oporto	NLD	50	57	+	45	
65	"	Bolero	USA	50	58	+	40	
66	"	Vertus	FRA	55	65	+	45	
67	"	Nostro	NLD	50	85	+	46	
68	"	Primodoro	"	50	75	+	45	
<u>A. porrum</u>								
70	"	Alaska	BEL	51	80	+	48	
71	"	Libertas	FRA	49	52	+	48	
72	"	Kilima	"	51	90	+	48	
73	"	Bluветia	NLD	51	66	+	48	
74	"	Helvetia	"	52	83	+	48	
75	"	Argenta	"	50	93	+	48	
76	"	Alberta	BEL	48	82	+	48	
77	Sluis en Groot	Blue green Winter	NLD	48	90	+	45	
78	"	Colonna	"	49	92	+	48	
79	"	Longina	"	48	83	+	48	
80	"	Artaban	FRA	60	81	+	47	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
81	Sluis en Groot	Verina	NLD	48	73	+	48	
82	"	Otina	"	48	92	+	48	
83	"	Herwina	"	48	77	+	48	
84	"	Catalina	BEL	54	92	+	48	
85	"	Carina	"	47	85	+	44	
86	"	Melwina	NLD	48	85	+	47	
87	"	Excelsior	"	50	94	+	48	
88	"	Platina	"	48	91	+	47	
89	"	Wintina	"	48	70	+	47	
90	"	Badine	BGR	49	71	+	47	
<u>A. cepa</u>								
91	van der Have	Polish variety x Dutch variety	NLD	47	86	+	45	
92	"	Rijnsburger strain x Russian var.	"	47	53	+	34	
93	"	Rijnsburger strain C-line	"	50	83	+	40	
94	"	Vroege Dirkslander	"	47	80	+	40	
95	"	Kaštiká	CSK	48	87	+	40	
96	"	Rijnsburger strain x Russian var.	NLD	50	74	+	40	
97	"	Rijnsburger strain C-line	"	38	93	+	34	
98	"	Russian var. x Rijnsburger strain	"	47	97	+	45	
99	"	Rijnsburger strain C-line	"	47	83	+	44	
100	"	Adina	"	47	96	+	44	
101	"	Bastina	"	47	89	+	45	
102	"	Juno	"	48	83	+	39	
103	"	Spalding	GBR	45	55	+	8	
104	Wabeke	Sel. Wabeke	NLD	45	99	+	43	
105	de Nijs	Sel. de Nijs extra	"	46	91	+	43	
106	Kees Broersen	Rocky	"	47	88	+	45	
107	"	Ramara	"	50	88	+	46	
108	"	Flintstone	"	50	61	+	45	
<u>A. porrum</u>								
109	Bejo	Siberia	NLD	48	95	+	47	
110	"	Jolant kort	"	48	93	+	48	
112	"	Fidola	"	49	91	+	48	
113	"	Géant d'hiver	FRA	13	95	+	5	
114	"	Géant d'hiver	NLD	49	95	+	48	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
<u>A. porrum</u>								
115	Bejo	Autumn Giant	NLD	48	95	+	47	
116	"	Medola	"	48	97	+	47	
117	"	Bulgaria x Splendid	"	48	89	+	48	
118	"	Hepra	"	48	93	+	48	
119	"	Jowinda	"	47	92	+	47	
120	"	Herdola	"	48	94	+	47	
121	"	Leone	"	45	71	+	45	
122	"	Jolant	"	47	72	+	46	
123	"	Derrick	"	48	70	+	47	
124	"	Blizzard	"	47	90	+	47	
<u>A. cepa</u>								
125	Enza	Mabol	NLD	47	88	+	42	
<u>A. porrum</u>								
126	"	Albinstar	"	48	71	+	47	
127	"	Bleustar	"	51	82	+	47	
128	"	Greenstar	"	47	93	+	47	
129	"	Snowstar	"	54	87	+	48	
130	"	Castelstar	"	49	71	+	47	
131	"	Starina	"	46	96	+	45	
132	"	Starlet	"	51	80	+	47	
133	Gebr. v. d. Berg	Enormus	"	52	88	+	48	
134	"	Molos	"	51	68	+	48	
135	"	Briljant	FRA	51	64	+	48	
136	"	Trivina	BEL	43	91	+	8	
137	Rijk Zwaan	Goliath Super RZ	NLD	48	86	+	47	
138	"	Winterreus Super RZ	"	47	72	+	47	
139	"	Alma RZ	"	51	80	+	46	
140	"	Rolan RZ	"	45	84	+	32	
141	"	Silva RZ	"	45	88	+	42	
142	"	Kajak RZ	"	48	65	+	47	
<u>A. cepa</u>								
143	"	Pikeur RZ	"	50	63	+	45	
145	Groenendijk en Zn.	Selgro	"	43	90	+	42	
146	Verbiest	Sel. Verbiest	"	45	97	+	35	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
<u>A. cepa</u>								
147	Hoogzand	Sel. Hoogzand	NLD	47	80	+	45	
148	Jos Huizer	Goudkogel	"	50	77	+	46	
149	"	Goldskin	"	48	86	+	45	
<u>A. porrum</u>								
150	"	Lawine	"	50	97	+	46	
151	"	Corine	"	53	83	+	48	
152	"	Martine	BEL	47	82	+	47	
<u>A. cepa</u>								
153	van der Have	Sapporo Yellow Globe	JAP	45	90	+	14	
154	IVT-Nickerson Zwaan	Proodus	NLD	50	84	+	47	
155	IVT-USSR	Skwirsky	SUN	40	91	+	7	
159	IVT-Fratelli-Italy	Ramata grossa di Milano	ITA	50	76	+	49	
160	IVT-Kobayashi-Japan	Inami cross two-k	JPN	48	82	+	8	
161	"	Inami cross one-k	"	50	81	+	5	
163	IVT-USSR	Strigunovsky	SUN	39	89	+	5	
166	IVT-USSR	Bessonovsky	SUN	43	84	+	5	
167	IVT-Czechoslovakia	"Alice"	CSK	43	81	+	5	
168	IVT-DDR - Quedlinburg	Bronzekugel	DDR	43	80	+	5	
169	IVT-USSR	Zolotoj	SUN	43	88	+	5	
170	IVT-Poland	Wolska	POL	43	91	+	5	
171	IVT-USSR	Danilovsky 301 Elite	SUN	43	93	+	5	
174	IVT-Egypt	Giza 6 Mohassan	EGY	50	95	+	47	
175	IVT-Israel	Beth Alpha Autumn	ISR	50	77	+	47	
176	IVT-Poland	Wolska	POL	50	80	+	48	
177	IVT-Germany	Birnförmige gelbe	DEU	50	86	+	47	
178	IVT-Germany	Nürnberger Blassrote Platttrunde	"	50	84	+	47	
179	IVT-Dessert USA	Texas Early Grano	USA	50	85	+	48	
180	IVT- "	New Mexico Yellow Grano	"	40	80	+	7	
181	IVT-USSR	Strigunovsky	SUN	40	79	+	8	
184	IVT-Poland	Wolska B	POL	40	79	+	12	
185	IVT-Czechoslovakia	Vsetatska	CSK	40	93	+	6	
186	IVT-de Groot en Slot	Grobol	NLD	45	75	+	10	
188	IVT-Poland	Wolska no 2	POL	45	85	+	8	
189	IVT-Bulgaria	Skwirsky	BGR	50	80	+	27	
190	IVT-v.d. Velde	Selo	NLD	45	88	+	13	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
191	IVT-Gebr. de Jongh	Victoria	NLD	45	76	+	12	
192	IVT-NAK-G	Ailsa Craig	GBR	11	88	+	3	
193	IVT-NAK-G	Ailsa Craig = Showmaster	"	10	81	+	3	
194	IVT-NAK-G	James Long Keeping	"	12	73	+	3	
195	IVT-NAK-G	Bedfordshire Champion	"	11	83	+	3	
196	IVT-NAK-G	Yellow Valencia	ESP	50	76	+	47	
197	IVT-NAK-G	Mulhouse Auxone	FRA	44	63	+	5	
198	Nickerson Zwaan	Cepria	NLD	50	76	+	47	
199	"	Produbel	"	50	87	+	47	
200	"	Sublima	"	50	88	+	47	
201	"	Enormus	"	48	86	+	45	
202	"	Produskin	"	50	92	+	46	
203	"	Robot	"	50	93	+	45	
204	"	Imposa	"	49	86	+	45	
205	"	Compas	"	49	85	+	45	
206	"	Produwin (Zwijndrechtse Pootui)	"	48	99	+	43	
207	"	Quicksilver	ISR	50	84	+	45	
208	"	Pompeï	NLD	50	76	+	45	
209	"	Barletta	"	48	94	+	45	
210	"	N.H. Bloedrode	"	55	86	+	45	
<u>A. porrum</u>								
211	"	Fibos	"	55	71	+	48	
212	"	Ficus	"	49	63	+	48	
213	"	Piket	"	51	56	+	48	
214	"	Baton	"	49	79	+	49	
215	"	Lux	"	47	90	+	47	
216	"	Triumphator	"	49	86	+	48	
217	"	Luwi	"	49	83	+	44	
218	"	Vincent	"	48	93	+	48	
219	"	Wila	"	50	85	+	49	
220	"	IJsbeer	"	47	66	+	47	
221	"	d'Elbeuf	"	49	74	+	46	
<u>A. cepa</u>								
222	IVT-Pakistan	No 420-5	PAK	43	66	+	5	
223	IVT-Egypt	Shandaweel No 1	EGY	50	72	+	47	
224	IVT-Sluis en Groot	Wijbo-line	NLD	43	63	+	5	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
225	IVT-Germany	Zittauer grosse gelbe	DEU	45	71	+	5	
226	IVT-Royal Sluis	White Lisbon	NLD	50	74	+	47	
227	IVT-Dessert	Yellow Ebenezer	USA	43	72	+	5	
228	IVT-Yugoslavia	Ptujski	YUG	43	60	+	5	
229	IVT	Experimental hybride	NLD	43	68	+	5	
230	IVT-Dessert	New Mexico Yellow	USA	50	74	+	48	
231	IVT- "	Texas Early Grano	"	43	63	+	5	
232	IVT- "	San Joaquin	"	50	74	+	47	
233	IVT-Yates, Australia	Spearwood late brown	AUS	43	60	+	5	
234	IVT-Asgrow, Germany	Pronto	USA	38	62	+	5	
235	IVT	Breeder's material	NLD	38	67	+	5	
236	IVT-Bulgaria	Markowsky	BGR	50	61	+	48	
238	IVT- "	Ptujski	"	38	64	+	5	
239	IVT- "	Iatrus	"	38	61	+	5	
241	IVT-Czechoslovakia	Vsetatska	CSK	43	72	+	5	
243	IVT-de Groot en Slot	Grobol	NLD	43	67	+	5	
244	IVT-Wed, P. de Jongh	Dura = Wolska strain	"	50	69	+	8	
245	IVT- "	Zittauer	"	50	74	+	47	
246	IVT- "	Enormus	"	50	66	+	9	
247	IVT- "	Favoriet	"	45	68	+	5	
249	IVT	Experimental hybride	"	45	69	+	5	
250	IVT	Breeder's material	"	50	61	+	48	
251	IVT-Rumseys, Australia	Early Lockyer Brown	AUS	50	69	+	6	
252	Gebr. Bakker	Mulbo	NLD	50	86	+	27	
<u>A. porrum</u>								
253	Gebr. Bakker	Autumn Giant	NLD	50	96	+	39	
254	"	Winter Giant	"	50	99	+	34	
<u>A. cepa</u>								
255	Meo-Voto	Klabro	NLD	50	93	+	50	
256	"	Mariska	"	50	78	+	50	
257	"	Red Wethersfield	"	50	73	+	50	
258	"	Brunswijker Comred	"	50	60	+	50	
259	"	Beltsville bunching	"	50	64	+	50	
260	"	White Lisbon	"	50	80	+	50	
261	"	White Ebenezer	"	50	89	+	50	
262	"	Aviv Perlina	"	50	95	+	50	

Annex II Results of collection.

Column:	1	2	3	4	5	6	7	8
Acc.nr.	Donor name	Cultivar name	Origin	Weight grams	Germ. %	Prel. acc.	Dupl. to Wellesb.	
263	Meo-Voto	Barletta	NLD	50	89	+	50	
264	"	Pompeï	"	50	87	+	50	
265	"	Stuttgarter	"	50	83	+	50	
266	Holland Select	Duraldo	"	50	92	+	34	
<u>A.porrum</u>								
267	Holland Select	Autumn Giant	NLD	50	81	+	27	
268	"	Winter Giant	"	50	88	+	50	
<u>A. cepa</u>								
269	Cebeco	Wabasto	"	50	86	+	49	
270	Meo-Voto	Zittauer	"	50	87	+	50	
271	IVT-Nickerson Zwaan	Promotor F1 hybride	-	39	61	+	5	
272	IVT-Poland	Sochaczewska = Wolska strain	POL	33	74	+	5	
273	IVT-Canada	Yellow Globe Danvers	USA	40	70	+	5	
275	IVT-Yates, Australia	Bunching onion Straight leaf	AUS	33	89	+	5	
276	IVT- "	" Savages Flat White	"	33	88	+	5	
277	IVT- "	S.A. White Globe	"	35	87	+	5	
278	IVT-Leningrad, USSR	Kaba	SUN	38	66	+	5	
279	IVT-Royal Sluis	N.H. Blood red	NLD	50	74	+	50	
<u>A.porrum</u>								
280	Nunhem	Titan Summer	NLD	50	78	+	50	
281	"	Kazan Autumn Giant	"	50	75	+	50	
282	"	Regius Autumn Giant	"	50	86	+	50	
283	"	Siegfried Winter Giant	"	50	83	+	50	
284	"	Atilla Blue Green Winter	"	50	91	+	50	
285	"	Kamusch Bulgarian Giant	"	50	89	+	50	
<u>A. cepa</u>								
286	Rijk Zwaan	Combo RZ	NLD	50	86	+	48	

APPENDIX III
(Continued)PASSPORTACCESSION DATA*J.V.T. All.*

1.1 ACCESSION NUMBER

This number serves as a unique identifier for accessions and is assigned by the curator when an accession is entered into his collection. Once assigned this number should never be reassigned to another accession in the collection. Even if an accession is lost, its assigned number is still not available for re-use. Letters should occur before the number to identify the genebank or national system (e.g. MG indicates an accession comes from the genebank at Bari, Italy. P.I. indicates an accession within the USA system.)

1.2 DONOR NAME

Name of institution or individual responsible for donating the germplasm

1.3 DONOR IDENTIFICATION NUMBER

Number assigned to accession by the donor

1.4 OTHER NUMBERS ASSOCIATED WITH THE ACCESSION (other numbers can be added as 1.4.3 etc)

Any other identification number known to exist in other collections for this accession, e.g. USDA Plant Introduction number (not collection number, see 2.1)

1.4.1 Other number 1

1.4.2 Other number 2

1.5 SCIENTIFIC NAME

1.5.1 Genus

Allium

1.5.2 Species

cepa /ampeloprasum spp. porrum/

1.6 PEDIGREE/CULTIVAR NAME

Nomenclature and designations assigned to breeder's material

1.7 ACQUISITION DATE

The month and year in which the accession entered the collection, expressed numerically, e.g. June = 06, 1981 = 81

1.7.1 Month

1.7.2 Year *1988*

1.8 DATE OF LAST REGENERATION OR MULTIPLICATION

Germination, %

The month and year expressed numerically, e.g. October = 10, 1978 = 78

1.8.1 Month

1.8.2 Year

APPENDIX III
(Continued)

1.9 ACCESSION SIZE *gram* *Seeds*

Approximate number of seeds or plants of accession in collection

1.10 NUMBER OF TIMES ACCESSION REGENERATED

Number of regenerations or multiplications since original collection

1.11 TYPE OF MAINTENANCE

- 1 Vegetative
- 2 Seed
- 3 Both
- 4 Tissue culture

1.12 COMMON NAME

- 1 Dry bulb onion
- 2 Shallot
- 3 Bunching onion
- 4 Garlic
- 5 Leek
- 6 Kurrat
- 7 Great-headed garlic
- 8 Chive
- 9 Rakkyo
- 10 Chinese chive
- 11 Other (specify)

2. COLLECTION DATA

2.1 COLLECTOR'S NUMBER

Original number assigned by collector of the sample normally composed of the name or initials of the collector(s) followed by a number. This item is essential for identifying duplicates held in different collections and should always accompany sub-samples wherever they are sent.

2.2 COLLECTING INSTITUTE *Institute for Horticultural Plantbreeding (I.V.T.)*
Wageningen - Netherlands P.O. Box 16

Institute or person collecting/sponsoring the original sample

2.3 DATE OF COLLECTION OF ORIGINAL SAMPLE

Expressed numerically, e.g. March = 03, 1980 = 80

2.3.1 Month

2.3.2 Year *1988*

2.4 COUNTRY OF COLLECTION *and* COUNTRY WHERE CULTIVAR/VARIETY BRED *NLD/.....*

Use the three letter abbreviations supported by the Statistical Office of the United Nations. Copies of these abbreviations are available from the IBPGR Secretariat and have been published in the FAO/IBPGR Plant Genetic Resources Newsletter number 49.

APPENDIX III
(Continued)

2.5 PROVINCE/STATE

Name of the administrative subdivision of the country in which the sample was collected

2.6 LOCATION OF COLLECTION SITE

Number of kilometres and direction from nearest town, village or map grid reference (e.g. Timbuktu 7S means 7km south of Timbuktu)

2.7 LATITUDE OF COLLECTION SITE

Degrees and minutes followed by N (north) or S (south), e.g. 1030S

2.8 LONGITUDE OF COLLECTION SITE

Degrees and minutes followed by E (east) or W (west), e.g. 7625W

2.9 ALTITUDE OF COLLECTION SITE

Elevation above sea level in metres

2.10 COLLECTION SOURCE

- 1 Wild
- 2 Farm land
- 3 Farm store
- 4 Backyard
- 5 Village market
- 6 Commercial market
- 7 Institute
- 8 Other (specify)

2.11 STATUS OF SAMPLE

- 1 Wild
- 2 Weedy
- 3 Breeders line
- 4 Primitive cultivar (landrace)
- 5 Advanced cultivar (bred)
- 6 Other (specify)

2.12 LOCAL/VERNACULAR NAME

Name given by farmer to cultivar/landrace/weed

2.13 NUMBER OF PLANTS SAMPLED

Approximate number of plants collected in the field to produce this accession

2.14 PHOTOGRAPH

Was a photograph taken of the accession or environment at collection?

- 0 = No
+ = Yes

APPENDIX III
(Continued)

2.15 TYPE OF SAMPLE

- 1 Vegetative
- 2 Seed
- 3 Both

2.16 PRIMARY CROP USAGE

- 1 Raw salad
- 2 Fresh cooking
- 3 Stored cooking
- 4 Freezing
- 5 Pickling
- 6 Dehydration
- 7 Other (specify)

2.17 OTHER NOTES FROM COLLECTOR

Collectors will record ecological information. For cultivated crops, cultivation practices such as irrigation, season of sowing, etc. will be recorded

early/medium/late summer/autumn/winter cultivar grown from

seeds/cuts/transplants.

Special characters:

further notes:

IBPGR COLLECTION FORM (GENERAL)

Descriptors in this column MUST be filled in

GENUS: _____

SPECIES: _____

SUBSPECIES: _____

COLLECTOR'S NUMBER: _____

COLLECTING INSTITUTE: _____

DATE OF COLLECTION: _____

COUNTRY OF COLLECTION: _____

PROVINCE/STATE: _____

LOCATION OF COLLECTION SITE

nearest town/village: _____

distance (in Km): _____

direction: _____

LATITUDE OF SITE: _____ N S

LONGITUDE OF SITE: _____ E W

ALTITUDE OF SITE: _____ (m)

COLLECTION SOURCE (circle one)

- | | | | |
|-----------|---|-------------------|---|
| wild | 1 | village market | 5 |
| farmland | 2 | commercial market | 6 |
| farmstore | 3 | institute | 7 |
| backyard | 4 | other (specify) | 8 |

STATUS OF SAMPLE (circle one)

- | | | | |
|----------------|---|-----------------------------|---|
| wild | 1 | primitive cultivar/landrace | 4 |
| weedy | 2 | advanced cultivar (bred) | 5 |
| breeder's line | 3 | other (specify) | 6 |

LOCAL NAME: _____

NUMBER OF PLANTS SAMPLED: _____

PHOTOGRAPH (circle one): yes no

Photo number: _____

TYPE OF SAMPLE (circle one)

- | | | | | | |
|------------|---|------|---|------|---|
| vegetative | 1 | seed | 2 | both | 3 |
|------------|---|------|---|------|---|

HERBARIUM SAMPLE (circle one): yes no

QUANTITY OF MATERIAL (number of seeds or plant samples): _____

Descriptors in this column SHOULD be filled in

CULTURAL PRACTICES:

- | | | |
|---------------------------|-----|----|
| shifting (circle one) | yes | no |
| irrigated (circle one) | yes | no |
| transplanted (circle one) | yes | no |
| terraced (circle one) | yes | no |

SOWING MONTH: _____

HARVEST MONTH: _____

USAGE (specify): _____

DISEASES AND PESTS (specify): _____

ASSOCIATED WILD AND WEEDY SPECIES AND CROPS

(specify): _____

TOPOGRAPHY (circle one)

- | | |
|-----------------|---|
| swamp | 1 |
| flood plain | 2 |
| plain level | 3 |
| undulating | 4 |
| hilly | 5 |
| mountainous | 6 |
| other (specify) | 7 |

SITE (circle one)

- | | |
|------------|---|
| level | 1 |
| slope | 2 |
| summit | 3 |
| depression | 4 |

STONINESS (circle one)

- | | |
|--------|---|
| none | 1 |
| low | 2 |
| medium | 3 |
| rocky | 4 |

SOIL TEXTURE (circle one)

- | | |
|----------------|---|
| sand | 1 |
| loam | 2 |
| clay | 3 |
| silt | 4 |
| highly organic | 5 |

DRAINAGE (circle one)

- | | |
|-----------|---|
| poor | 1 |
| moderate | 2 |
| good | 3 |
| excessive | 4 |

OTHER OBSERVATIONS: _____