

# Implementation of AEGIS in The Netherlands

*Theo van Hintum*

*Centre for Genetic Resources, The Netherlands (CGN)*



# AEGIS in The Netherlands



- The Netherlands is a major contributor to AEGIS
  
- 5845 AEGIS accessions from NL
  - 12.5% of the 47049 AEGIS accessions
    - 2<sup>nd</sup> largest contributor (after Germany)
  - 25.5% of the 22906 accessions of the Centre for Genetic Resources, The Netherlands (CGN)
    - 22.4% from the total 26097 NL accessions
    - no AEGIS accessions from the other Associate Member from NL (Radboud University Nijmegen)



- CGN collections
  - 25 crop collections with 23,056 accessions
    - originating from more than 100 countries
    - focus on vegetable crops and potato
    - focus on small numbers of high quality



- CGN collections
  - 25 crop collections with 23,056 accessions

## CGN collections (November 29<sup>th</sup>, 2018)

lettuce	2492	wheat	4909
potato	1471	barley	2666
tomato	1335	flax	952
onion	434	pea	1010
spinach	485		
pepper	1130	<i>other crops</i>	3452
cucumber	925		
cabbage etc.	1795	<i>TOTAL</i>	23056



- procedure for selection AEGIS material
  - CGN collection comprised 22,549 accessions at the time of selection (Nov. 2012)
    - 5864 accs. (26.0%) of these were nominated based on the 'German approach'
  - selection criteria – indicating originality
    - origin in the Netherlands (3456 accs = 15.3% )
    - collected by CGN or its predecessors (2462 accs = 10.9%)
    - donated to CGN for safekeeping (186 accs = 0.8%)
      - 240 accs (1.1%) fell in both first two categories

# AEGIS in The Netherlands



in AEGIS						origin in NLD					collected by CGN				donated to CGN				Tot
crop	+	-	+	-	Tot	crop	+	-	+	-	+	-	+	-	+	-	+	-	
wheat	646	4265	13%	87%	4911	wheat	186	4725	4%	96%	460	4451	9%	91%	4911	100%	4911		
barley	642	2023	24%	76%	2665	barley	339	2326	13%	87%	303	2362	11%	89%	2665	100%	2665		
lettuce	832	1531	35%	65%	2363	lettuce	502	1861	21%	79%	330	2033	14%	86%	2363	100%	2363		
cruciferae	763	1027	43%	57%	1790	cruciferae	631	1159	35%	65%	132	1658	7%	93%	1790	100%	1790		
potato	452	986	31%	69%	1438	potato		1438		100%	452	986	31%	69%	1438	100%	1438		
tomato	136	1183	10%	90%	1319	tomato	96	1223	7%	93%	11	1308	1%	99%	29	1290	2%	98%	1319
pepper	137	873	14%	86%	1010	pepper	67	943	7%	93%	31	979	3%	97%	39	971	4%	96%	1010
peas	300	702	30%	70%	1002	peas	237	765	24%	76%	63	939	6%	94%	1002	100%	1002		
flax	52	900	5%	95%	952	flax	52	900	5%	95%	52	900		100%	952	100%	952		
cucumber	216	721	23%	77%	937	cucumber	158	779	17%	83%	58	879	6%	94%	937	100%	937		
fabo beans	96	632	13%	87%	728	fabo beans	68	660	9%	91%	28	700	4%	96%	728	100%	728		
eggplant	118	392	23%	77%	510	eggplant	8	502	2%	98%	3	507	1%	99%	107	403	21%	79%	510
maize	195	292	40%	60%	487	maize	16	471	3%	97%	179	308	37%	63%	487	100%	487		
allium	151	266	36%	64%	417	allium	62	355	15%	85%	89	328	21%	79%	417	100%	417		
lolium	290	107	73%	27%	397	lolium	289	108	73%	27%	8	389	2%	98%	397	100%	397		
oats	75	320	19%	81%	395	oats	75	320	19%	81%	75	320		100%	395	100%	395		
spinach	117	270	30%	70%	387	spinach	106	281	27%	73%	11	376	3%	97%	387	100%	387		
clover	237	26	90%	10%	263	clover	202	61	77%	23%	213	50	81%	19%	263	100%	263		
meadow grass	132	2	99%	1%	134	meadow grass	132	2	99%	1%	55	79	41%	59%	134	100%	134		
timothy	90	18	83%	17%	108	timothy	85	23	79%	21%	5	103	5%	95%	108	100%	108		
fescue	67	10	87%	13%	77	fescue	66	11	86%	14%	1	76	1%	99%	77	100%	77		
lupin	25	44	36%	64%	69	lupin	25	44	36%	64%	69		100%	69	100%	69			
melon	40	19	68%	32%	59	melon	2	57	3%	97%	27	32	46%	54%	11	48	19%	81%	59
cocksfoot	25	17	60%	40%	42	cocksfoot	22	20	52%	48%	3	39	7%	93%	42	100%	42		
lily		40		100%	40	lily		40		100%	40		100%	40	100%	40			
lamb's lettuce	13	18	42%	58%	31	lamb's lettuce	13	18	42%	58%	31		100%	31	100%	31			
agrostis	11		100%		11	agrostis	11		100%		11		100%	11	100%	11			
black salsify	6	1	86%	14%	7	black salsify	6	1	86%	14%	7		100%	7	100%	7			
<b>Tot</b>	<b>5864</b>	<b>16685</b>	<b>26%</b>	<b>74%</b>	<b>22549</b>	<b>Tot</b>	<b>3456</b>	<b>19093</b>	<b>15%</b>	<b>85%</b>	<b>2462</b>	<b>20087</b>	<b>11%</b>	<b>89%</b>	<b>186</b>	<b>22363</b>	<b>1%</b>	<b>99%</b>	<b>22549</b>





- procedure for selection AEGIS material (cont'd)
  - January 8<sup>th</sup> 2013 all Crop WGs were approached by the ECPGR secretariat with the CGN proposal
    - some confirmed / approved
    - others did not answer – CGN did not wait
  - March 29<sup>th</sup> 2013 all 5864 accessions were flagged as AEGIS accessions in EURISCO

# AEGIS in The Netherlands

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- doubts regarding ECPGR proposed selection procedure of material were confirmed
  - too complicated - too slow – too labour intensive
- the 'German approach' worked fine for CGN
  - DE & NL supplied 49.6% of AEGIS accessions





- proposal alternative selection procedure
  - genebanks or countries nominate AEGIS material: candidate AEGIS accessions
  - genebanks with candidate AEGIS accessions are reviewed
    - AQUAS criteria are monitored
  - once genebanks are certified: AEGIS accessions
  - crop WG's improve list of AEGIS accessions
    - identify duplicates – up to genebank to decide on removal
    - identify omissions – stimulate genebanks to join/include

# AEGIS in The Netherlands



- CGN submitted AQUAS Genebank Manual (Aug 2012)
  - CGN was first genebank with ISO-9001 certification (2003)
    - basis for long-term performance and collaboration
    - easy to comply with AQUAS



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# Thank you for your attention !

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