## PLANT PATENTS

### **JANUARY 1977 -- DECEMBER 1998**



March 1999 U.S. PATENT AND TRADEMARK OFFICE OFFICE FOR PATENT AND TRADEMARK INFORMATION/ TAF PROGRAM PK 3 - SUITE 441, WASHINGTON, DC 20231 TEL (703) 306-2600/ FAX (703) 306-2737

A TECHNOLOGY ASSESSMENT AND FORECAST REPORT

### Plant Patents Report 1/1977 - 12/1998 **Explanation of Data**

This Technology Assessment and Forecast (TAF) Program Report profiles patent activity for U.S. plant patents (hereafter referred to as patents) granted between 1977 and December 1998. The source of the data used for this report is the TAF data base maintained by the Office for Patent and Trademark Information.

Data Distribution By Date of Grant and By Date of Application

#### Parts A1 and A2

Part A1 distributes patent GRANT data by year of patent grant ("Patents Granted By Date of Patent Grant"). Part A2 distributes grant data by the year in which the patented application was filed ("Patents Granted By Date of Patent Application"). Parts A1 and A2 each provide patent counts (pages A1-1 and A2-1) and percent distributions (pages A1-2 and A2-2).

Patent data in the "Pre 1985" column corresponds to the period January 1, 1977 through December 31, 1984.

#### Part B

Part B of this report distributes patent GRANT data for organizations that have received U.S. patents since 1977. Data are presented by the year in which the patent was granted ("Patents By Year of Grant") and the year the patented application was filed ("Patents by Year of Application").

DATA FOR THOSE APPLICATIONS WHICH WERE FILED BUT NEVER ISSUED (ROUGHLY 40% OF TOTAL FILINGS) ARE NOT INCLUDED IN THIS REPORT.

Since the average time period between filing for a patent and the issuing of the patent (i.e., a patent's "pendency") is now about 24 months, the patented application data for the most recent years are incomplete.\* This is because a significant number of the applications filed in the most recent years, which will ultimately become patents, were still pending in **December 1998.** Since they had not yet become patents at the time this report was prepared, they were not included in this report.

Patented application data are of significant value since the date an application was filed more accurately reflects when the technology was developed. Additionally, fluctuations in data based on application date are much more likely to reflect changes in technological activity, since such fluctuations would for the most part be immune from changes in PTO processing such as occurred in 1986 when the PTO issued fewer patents than would normally have been expected due to a lack of funds to print patents. Note that a patent's "pendency" can be quite variable from one patent to another thereby affecting the date of

patent grant. Such variation in pendency is determined by many factors, including PTO workload (which varies between technologies), budget and manpower levels, patent printing schedules, etc.

#### Parts of the Report

Parts A1 and A2 present tables which show, by number and percent, the patent activity. Part A1 presents data by year of patent grant ("Patents Granted by Date of Patent Grant"). Part A2 redistributes grant data by year of patent application ("Patents Granted by Date of Patent Application"). The location of patent origin is determined by the residence of the first-named inventor at the time of grant.

Information on patent ownership reflects ownership at the time of patent grant and does not include subsequent changes in ownership. If more than one assignee was declared at the time of grant, the patent is attributed to the first-named assignee. The U.S. and Foreign Corporations ownership categories count predominantly corporate patents; however, patents assigned to other organizations such as small businesses, nonprofit organizations, universities, etc. are also included in this category. While U.S. Government patent ownership includes only patents granted to the Federal Government, no such distinction is made for Foreign Government patents.

**Part B** is a ranked listing of national and international organizations (i.e., corporations, universities, government agencies) which have received 3 or more U.S. plant patents since 1977. Data line 1 for each listed organization distributes counts of patent grants by year of grant. Data line 2 for each organization redistributes those same patent grants by year in which the patented application was filed. Information on patent ownership reflects ownership at the time of patent grant. Although a substantial effort has been made to combine name variations into a single organizational name, many organizations continue to have patents listed under more than one organizational name.

<sup>\*</sup> As of December 31, 1998, UTILITY patent application data (most issued patent documents are utility patents) were approximately 98% complete for patent applications filed in 1995, 84% complete for applications filed in 1996, and 27% complete for applications filed in 1997. They are essentially complete for applications filed prior to 1995. Currently, completion percentages restricted to plant patents are not available.

# Part A1 Patent Grants As Distributed By Year of Patent Grant

		Patents	Granted	By Da	ate Of	Patent	Grant (	Granted:	Jan 01,	1977 -	Dec 31,	1998)					
									D								
	Pre 1985	1985	1986	1987	1988	1989	1990	MBER OF 1991	1992	1993	1994	1995	1996	1997	1998	Total	
Total	1372	242	224	229	425	587	318	353	321	442	499	387	362	394	561	6716	
U.S. Origin	1045	143	150	131	260	345	153	237	196	236	283	201	183	230	245	4038	
Foreign Origin	327	99	74	98	165	242	165	116	125	206	216	186	179	164	316	2678	
GERMANY	136	25	17	25	27	102	51	39	17	52	32	44	48	34	62	711	
NETHERLANDS	36	27	17	21	54	58	38	23	46	63	63	34	41	29	71	621	
FRANCE	31	22	16	6	32	24	34	21	13	22	16	16	18	27	27	325	
UNITED KINGDOM	50	3	3	16	13	13	11	7	4	13	37	16	8	22	24	240	
DENMARK	12	2	1	2	13	3	1	3	4	3	11	16	27	9	40	147	
JAPAN	6		2		3	12	7	2	11	8	9	13	9	6	20	108	
ISRAEL	1	1			2		2		7	21	14	21	7		12	88	
AUSTRALIA	1			1	7	10	3	9	2	3	2	3	7	14	13	75	
NEW ZEALAND	14	6	1	2	3	8	2	4	7	7	6	4	2	2	4	72	
CANADA	8		1	3		4	6	1	8	5	2	7		15	8	68	
COSTA RICA	12	11	6	2	1	_		3	-	4	4	6	5		4	58	
BELGIUM			3	2	5	1		2	2	2	10	3	2	4	20	56	
ITALY	2	2	5	1	4	2	9		2	2	1	1	2	-	1	34	
AUSTRIA	-		,	15	1	-	,				1	-			-	17	
SWITZERLAND	10			1	_	2					-					13	
SPAIN	10			_		2			2		3		2			9	
SWEDEN	2		1			2		1	4	1	3		1		1	8	
	3		1					1		1			1		1 6		
SOUTH AFRICA	_			1		_	_				_				0	7	
COLOMBIA	3		_			1	1				1	1		_		7	
ARGENTINA			1								1			1		3	
TAIWAN	1										1					2	
IRELAND											1	1				2	
HONDURAS											1			1		2	
INDIA															2	2	
LEBANON								1								1	
NORWAY	1															1	
MOROCCO															1	1	
Ownership:																	
U.S. Corporations	818	104	125	120	197	308	144	188	164	232	250	200	163	198	237	3448	
U.S. Government								1						2		3	
U.S. Individuals	415	65	63	43	98	119	57	75	60	61	82	59	55	73	74	1399	
Foreign Corporations	75	61	26	43	96	89	75	44	74	104	150	104	116	98	199	1354	
Foreign Government						2	1	1	8	5	2	5		5	1	30	
Foreign Individuals	64	12	10	23	34	69	41	44	15	40	15	19	28	18	50	482	

		Patents	Granted	l By Da	ate Of	Patent	Grant (	Granted:	Jan 01,	1977 -	Dec 31,	1998)					
								RCENT OF									
	Pre 1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
U.S. Origin	76	59	67	57	61	59	48	67	61	53	57	52	51	58	44	60	
Foreign Origin	24	41	33	43	39	41	52	33	39	47	43	48	49	42	56	40	
GERMANY	10	10	8	11	6	17	16	11	5	12	6	11	13	9	11	11	
NETHERLANDS	3	11	8	9	13	10	12	7	14	14	13	9	11	7	13	9	
FRANCE	2	9	7	3	8	4	11	6	4	5	3	4	5	7	5	5	
UNITED KINGDOM	4	1	1	7	3	2	3	2	1	3	7	4	2	6	4	4	
DENMARK	1	1		1	3	1		1	1	1	2	4	7	2	7	2	
JAPAN			1		1	2	2	1	3	2	2	3	2	2	4	2	
ISRAEL							1		2	5	3	5	2		2	1	
AUSTRALIA					2	2	1	3	1	1		1	2	4	2	1	
NEW ZEALAND	1	2		1	1	1	1	1	2	2	1	1	1	1	1	1	
CANADA	1			1		1	2		2	1		2		4	1	1	
COSTA RICA	1	5	3	1				1		1	1	2	1		1	1	
BELGIUM			1	1	1			1	1		2	1	1	1	4	1	
ITALY		1	2		1		3		1				1			1	
AUSTRIA				7												0	
SWITZERLAND	1															0	
SPAIN									1		1		1			0	
SWEDEN																0	
SOUTH AFRICA															1	0	
COLOMBIA																0	
ARGENTINA																0	
TAIWAN																0	
IRELAND																0	
HONDURAS																0	
INDIA																0	
LEBANON																0	
NORWAY																0	
MOROCCO																0	
Ownership:																	
U.S. Corporations	60	43	56	52	46	52	45	53	51	52	50	52	45	50	42	51	
U.S. Government														1		0	
U.S. Individuals	30	27	28	19	23	20	18	21	19	14	16	15	15	19	13	21	
Foreign Corporations	5	25	12	19	23	15	24	12	23	24	30	27	32	25	35	20	
Foreign Government									2	1		1		1		0	

5 5 4 10

Foreign Individuals

8 12

13

12

# Part A2 Patent Grants As Distributed By Year of Patent Application

	Pate	ents Gr	anted B	y Date	Of Pat	ent App	lication	(Grant	ed: Jan	01, 1977	- Dec 3	1, 1998)					
						N	UMBER OF	PATENTE	ED APPLIC	CATIONS							
	Pre 1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total	
Total	1851	263	304	422	360	363	410	399	314	340	424	429	599	238		6716	
U.S. Origin	1337	163	184	241	224	195	251	212	179	214	221	217	306	94		4038	
Foreign Origin	514	100	120	181	136	168	159	187	135	126	203	212	293	144		2678	
GERMANY	179	25	15	66	56	53	45	35	26	25	46	52	46	42		711	
NETHERLANDS	83	22	38	60	19	40	40	74	28	41	37	47	57	35		621	
FRANCE	71	7	30	12	17	37	22	12	19	13	14	21	35	15		325	
UNITED KINGDOM	58	16	9	8	12	10	13	7	16	14	23	11	33	10		240	
DENMARK	15	2	12	1	4	2	2	6		8	19	27	34	15		147	
JAPAN	8		3	7	8	4	12	4	11	2	12	15	19	3		108	
ISRAEL	2		2		2		1	29	5	7	25	3	12			88	
AUSTRALIA	2		2	14	2	8	4	2	2	2	4	8	21	4		75	
NEW ZEALAND	22	2	3	5	2	5	6	8	6	1	5	2	5			72	
CANADA	10	2		3	6	2	4	6	5	1	6	8	11	4		68	
COSTA RICA	30	1	1				3		5	1	5	8		4		58	
BELGIUM	4	3	3	1			4		6	8	2	3	15	7		56	
ITALY	9	3	2		7	4	1	3	1		1	2	1			34	
AUSTRIA		16								1						17	
SWITZERLAND	10	1		2												13	
SPAIN				2			2		3			2				9	
SWEDEN	4					1		1			1			1		8	
SOUTH AFRICA	1											1	4	1		7	
COLOMBIA	3				1	1			1		1					7	
ARGENTINA	1									1		1				3	
TAIWAN	1								1							2	
IRELAND										1	1					2	
HONDURAS											1	1				2	
INDIA														2		2	
LEBANON						1										1	
NORWAY	1															1	
MOROCCO														1		1	
Ownership:																	
U.S. Corporations	1054	133	144	215	184	178	205	184	182	184	213	190	283	99		3448	
U.S. Government						1						1	1			3	

U.S. Individuals

Foreign Corporations

Foreign Government

Foreign Individuals

---- Patents Granted By Date Of Patent Application (Granted: Jan 01, 1977 - Dec 31, 1998) ----

						PI	ERCENT OF	PATENTE	D APPLIC	ATIONS						
	Pre 1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Total
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100		100
U.S. Origin	72	62	61	57	62	54	61	53	57	63	52	51	51	39		60
Foreign Origin	28	38	39	43	38	46	39	47	43	37	48	49	49	61		40
GERMANY	10	10	5	16	16	15	11	9	8	7	11	12	8	18		11
NETHERLANDS	4	8	13	14	5	11	10	19	9	12	9	11	10	15		9
FRANCE	4	3	10	3	5	10	5	3	6	4	3	5	6	6		5
UNITED KINGDOM	3	6	3	2	3	3	3	2	5	4	5	3	6	4		4
DENMARK	1	1	4		1	1		2		2	4	6	6	6		2
JAPAN			1	2	2	1	3	1	4	1	3	3	3	1		2
ISRAEL			1		1			7	2	2	6	1	2			1
AUSTRALIA			1	3	1	2	1	1	1	1	1	2	4	2		1
NEW ZEALAND	1	1	1	1	1	1	1	2	2		1		1			1
CANADA	1	1		1	2	1	1	2	2		1	2	2	2		1
COSTA RICA	2						1		2		1	2		2		1
BELGIUM		1	1				1		2	2		1	3	3		1
ITALY		1	1		2	1		1								1
AUSTRIA		6														0
SWITZERLAND	1															0
SPAIN									1							0
SWEDEN																0
SOUTH AFRICA													1			0
COLOMBIA																0
ARGENTINA																0
TAIWAN																0
IRELAND																0
HONDURAS																0
INDIA														1		0
LEBANON																0
NORWAY																0
MOROCCO																0
Ownership:																
U.S. Corporations	57	51	47	51	51	49	50	46	58	54	50	44	47	42		51
U.S. Government																0
U.S. Individuals	29	24	22	19	21	17	20	15	15	17	15	18	15	14		21
Foreign Corporations	9	17	23	19	14	22	17	29	21	26	29	30	30	35		20
Foreign Government								3	1		1		1			0
Foreign Individuals	5	9	7	10	13	11	12	8	4	2	5	7	7	10		7

## Part B

Ranked Listing of Organizations with Patent Grants
As Distributed By Year of Patent Grant
and As Distributed By Year of Patent Application

Organizational Patenting				(Grante	ed: Jan 0	1, 1977	- Dec 31,	, 1998)		Ranked Li	st of Or	ganizati	ons with	5 or	More Pat	tents	-
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
		2505			2500	2505							2330				
YODER BROTHERS, INC.																	
Patents By Year of Grant:	94	17	17	9	21	45	14	47	18	38	53	22	29	36	26	486	
Patents By Year of Application:	129	8	14	21	32	45	28	35	24	43	29	23	39	16	0	486	
CONARD-PYLE COMPANY																	
Patents By Year of Grant:	45	5	6	6	13	14	21	12	9	24	13	10	16	14	7	215	
Patents By Year of Application:	59	5	10	7	11	18	17	11	18	12	10	18	13	6	0	215	
BEAR CREEK GARDENS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	9	2	15	14	13	61	29	17	4	15	179	
Patents By Year of Application:	0	0	0	9	2	0	27	14	26	30	35	12	17	7	0	179	
JACKSON & PERKINS CO.																	
Patents By Year of Grant:	71	7	21	13	13	21	10	1	0	0	0	0	0	0	0	157	
Patents By Year of Application:	98	11	17	18	6	7	0	0	0	0	0	0	0	0	0	157	
MIKKELSENS, INC.																	
Patents By Year of Grant:	56	4	6	12	23	6	12	0	15	6	12	1	3	1	0	157	
Patents By Year of Application:	70	8	12	15	2	12	13	2	6	12	1	4	0	0	0	157	
PAUL ECKE RANCH, INC.																	
Patents By Year of Grant:	9	0	0	0	0	0	14	7	11	25	12	16	1	14	26	135	
Patents By Year of Application:	9	0	0	0	11	6	15	8	18	11	16	4	22	15	0	135	
PAN AMERICAN PLANT COMPANY																	
Patents By Year of Grant:	89	19	8	0	0	0	0	0	0	0	0	0	0	0	0	116	
Patents By Year of Application:	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	
NOR'EAST MINIATURE ROSES, INC.	00	•		•	•	1.0	-	-	-	_		-	_	_		105	
Patents By Year of Grant:	28 40	8 8	3 2	9 11	2 7	17 4	1 5	5 5	5 4	7	4	1 2	6 4	5 3	4	105 105	
Patents By Year of Application:	40	8	2	11	,	4	5	5	4	3	,	2	4	3	U	105	
DEVOR NURSERIES, INC.																	
Patents By Year of Grant:	5	0	0	2	0	4	0	16	18	5	4	10	13	5	7	89	
Patents By Year of Application:	5	2	0	3	1	7	18	9	6	5	9	13	10	1	0	89	
MELRIDGE, INC.																	
Patents By Year of Grant:	17	0	1	19	26	20	0	0	0	0	0	0	0	0	0	83	
Patents By Year of Application:	19	18	21	25	0	0	0	0	0	0	0	0	0	0	0	83	
FIDES BEHEER B.V.	•	•	•	•	1.2	20	•	•	1.4	22		_		•	_	70	
Patents By Year of Grant: Patents By Year of Application:	0	0	13	0 18	13 2	20 0	0	0 31	14 2	23 1	1 2	2 1	1	2	3	79 79	
racents by rear or Apprication:	U	U	13	10	4	U	*	31	2	_	2	_	3	4	U	13	

Organizational Patenting				(Grante	ed: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or	More Pat	cents
	Pre															
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
GESSELLSCHAFTSVERTRAG UBER DIE ERFIND	33 33	ISCHAFT ·	'OPTI 5	0	6	16	0	0	0	0	0	0	0	0	0	77
Patents By Year of Grant:	55	0	6	16	0	0	0	0	0	0	0	0	0	0	0	77
Patents By Year of Application:	55	U	0	10	U	U	U	U	U	U	U	U	U	U	U	77
UNIVERSITY OF CALIFORNIA, THE REGENTS	OF															
Patents By Year of Grant:	36	0	1	1	6	10	1	2	0	4	8	2	2	0	4	77
Patents By Year of Application:	37	3	3	11	1	0	2	3	1	8	2	2	4	0	0	77
VAN STAAVEREN B.V.																
Patents By Year of Grant:	0	0	0	5	4	6	0	5	17	4	12	6	4	4	10	77
Patents By Year of Application:	0	5	3	7	0	0	22	4	2	10	6	4	11	3	0	77
FLORFIS AG																
Patents By Year of Grant:	0	0	0	0	0	0	6	3	0	8	15	14	11	5	7	69
Patents By Year of Application:	0	0	0	0	0	9	0	7	1	15	18	10	8	1	0	69
LABORATOIRE DE PHYSIOLOGIE VEGETALE DI																
Patents By Year of Grant:	0	20	6	3	17	3	11	0	0	1	4	1	0	0	0	66
Patents By Year of Application:	27	2	18	2	8	3	0	1	4	0	1	0	0	0	0	66
GRODGE I DALL ING																
GEORGE J. BALL, INC.	6	1	0	0	0	0	0	3	0	13	4	12	22	0	0	61
Patents By Year of Grant: Patents By Year of Application:	7	0	0	0	0	0	3	3 7	7	3	12	22	0	0	0	61
ratemes by rear or apprication:	,	U	U	U	U	U	3	,	,	3	12	22	U	U	U	01
ARMSTRONG NURSERIES, INC.																
Patents By Year of Grant:	37	9	7	2	2	0	0	0	0	0	0	0	0	0	0	57
Patents By Year of Application:	53	4	0	0	0	0	0	0	0	0	0	0	0	0	0	57
BALL PANAM PLANT COMPANY																
Patents By Year of Grant:	0	0	6	19	21	10	0	0	0	0	0	0	0	0	0	56
Patents By Year of Application:	7	20	10	19	0	0	0	0	0	0	0	0	0	0	0	56
DANZIGER - "DAN" FLOWER FARM																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	1	16	2	20	4	0	7	50
Patents By Year of Application:	0	0	0	0	0	0	0	17	2	0	21	3	7	0	0	50
CALIFORNIA FLORIDA PLANT COMPANY L.P.		_					_					_				
Patents By Year of Grant:	0	0	0	0	0	0	0	3	8	21	0	5	0	4	8	49
Patents By Year of Application:	0	0	0	0	0	0	10	9	12	1	5	0	12	0	0	49
OUDVCANDUENTM DDEEDEDG ACCOCTANTON N																
CHRYSANTHEMUM BREEDERS ASSOCIATION N. Patents By Year of Grant:	v. 2	1	1	13	11	2	0	0	0	2	9	0	0	3	3	47
Patents By Year of Application:	10	12	1	13 6	1	0	0	4	0	7	0	0	6	0	0	47
racence by rear or appricacion:	10	12		U		U	U	7	U	,	U	U	U	U	U	7/

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizatio	ons with	5 or 1	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
DE RUITER'S NIEUWE ROZEN B.V.																	
Patents By Year of Grant:	0	0	0	0	4	1	1	7	0	3	6	5	9	0	10	46	
Patents By Year of Application:	0	0	4	0	1	6	2	3	6	1	2	11	4	6	0	46	
DAVID AUSTIN ROSES LIMITED																	
Patents By Year of Grant:	0	0	0	0	0	0	4	3	0	9	20	0	5	0	3	44	
_	0			0	4	3	9			5		5	0	3	0		
Patents By Year of Application:	U	0	0	U	4	3	9	0	11	5	4	5	U	3	U	44	
WEEKS WHOLESALE ROSE GROWERS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	3	0	1	2	3	0	10	7	4	7	37	
Patents By Year of Application:	0	0	0	1	2	0	1	3	2	2	8	7	6	5	0	37	
OGLEVEE LTD.																	
Patents By Year of Grant:	0	0	0	0	0	12	2	0	5	4	2	4	2	2	3	36	
Patents By Year of Application:	0	0	0	0	9	5	1	7	1	0	6	4	3	0	0	36	
1400105 27 1041 01 11551104010111		•				-	-	•	_			-					
TERRA NIGRA HOLDING B.V.																	
	•	0	•	•	•	•	•	0	10	•	10	5	0	9	0	26	
Patents By Year of Grant:	0	-	0	0	0	0	0		10	0	12	_	-	-	•	36	
Patents By Year of Application:	0	0	0	0	0	0	3	7	7	9	1	4	5	0	0	36	
OGLEVEE ASSOCIATES, INC.																	
Patents By Year of Grant:	27	0	2	0	5	0	0	0	0	0	0	0	0	0	0	34	
Patents By Year of Application:	27	2	5	0	0	0	0	0	0	0	0	0	0	0	0	34	
STARK BROTHERS NURSERIES & ORCHARDS CO	OMPANY																
Patents By Year of Grant:	20	4	2	0	2	1	0	0	0	0	2	2	0	0	0	33	
Patents By Year of Application:	26	0	2	0	1	0	0	0	1	1	2	0	0	0	0	33	
CLEANGRO, LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	3	0	0	15	14	32	
	0	0	0	0	0	0	0	0	2	1	1	0	25	3	0	32	
Patents By Year of Application:	U	U	U	U	U	U	U	U	4			U	25	3	U	32	
SEQUOIA NURSERY																	
Patents By Year of Grant:	8	2	5	1	2	5	1	0	3	5	0	0	0	0	0	32	
Patents By Year of Application:	15	1	1	3	3	1	0	7	1	0	0	0	0	0	0	32	
BALL SEED CO., A DIVISION OF GEO. J. 1	BALL, IN	c.															
Patents By Year of Grant:	0	0	0	0	0	16	0	3	3	1	2	6	0	0	0	31	
Patents By Year of Application:	0	0	0	7	9	0	6	0	1	0	5	3	0	0	0	31	
RUTGERS UNIVERSITY																	
Patents By Year of Grant:	0	4	1	0	0	9	7	2	0	4	2	2	0	0	0	31	
Patents By Year of Application:	5	0	0	3	12	1	2	4	3	0	1	0	0	0	0	31	
-1	-	-	-	-		_	_	=		-	_	-	-	-			

Organizational Patenting				(Grante	ed: Jan (	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or	More Pat	cents
	Pre 1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
JOHN BODGER & SONS CO.																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	2	0	7	21	30
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	2	7	17	4	0	30
MONROVIA NURSERY CO.																
Patents By Year of Grant:	10	0	2	2	3	3	1	0	1	0	2	0	2	2	2	30
Patents By Year of Application:	13	3	1	2	2	0	1	0	0	2	0	2	4	0	0	30
TWYFORD INTERNATIONAL, INC.																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	7	3	8	9	2	29
Patents By Year of Application:	0	0	0	0	0	0	0	0	1	6	4	9	8	1	0	29
KLEMM & SOHN																
Patents By Year of Grant:	0	0	0	1	3	5	3	2	2	2	8	2	0	0	0	28
Patents By Year of Application:	0	4	0	0	6	4	2	2	2	8	0	0	0	0	0	28
SUNTORY LTD.																
Patents By Year of Grant:	0	0	0	0	0	3	0	0	0	0	2	7	3	3	10	28
Patents By Year of Application:	0	0	0	0	3	0	0	0	0	0	5	10	8	2	0	28
DRISCOLL STRAWBERRY ASSOCIATES INC.																
Patents By Year of Grant:	13	0	1	0	2	1	2	1	0	0	3	1	0	0	3	27
Patents By Year of Application:	13	1	2	0	3	1	0	0	0	3	1	0	2	1	0	27
DUMMEN JUNGPFLANZENKULTUREN																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	19	6	0	25
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	20	5	0	0	25
GOLDSMITH SEEDS, INC.																

Patents By Year of Grant:

GEBR. VLETTER & J.A. DEN HAAN
Patents By Year of Grant:

PURDUE RESEARCH FOUNDATION
Patents By Year of Grant:

CEBECO LILIES, INC.

Patents By Year of Application:

Patents By Year of Grant:

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31,	1998)	;	Ranked Li	st of Or	ganizati	ons with	5 or	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
SELECTION NEW PLANT SARL																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	11	6	2	19	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	11	0	7	1	0	19	
BALL HORTICULTURAL COMPANY																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	13	5	18	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	18	
SUN VALLEY BULB FARMS, INC.																	
Patents By Year of Grant:	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
Patents By Year of Application:	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
SUNSHINE FOLIAGE WORLD																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	3	4	2	1	7	17	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	3	4	2	7	1	0	17	
SUPERIOR FARMING COMPANY																	
Patents By Year of Grant:	12	3	0	0	1	0	1	0	0	0	0	0	0	0	0	17	
Patents By Year of Application:	15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	17	
B. L. COBIA, INC.																	
Patents By Year of Grant:	8	0	0	3	0	0	5	0	0	0	0	0	0	0	0	16	
Patents By Year of Application:	8	3	0	0	5	0	0	0	0	0	0	0	0	0	0	16	
B. V. HANDELSKWEKERIJ/M. C. VAN STAAV	EREN																
Patents By Year of Grant:	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
Patents By Year of Application:	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
ETS. GUILLOU FRERES																	
Patents By Year of Grant:	0	0	0	0	0	0	7	2	0	0	0	2	2	2	1	16	
Patents By Year of Application:	0	0	0	0	0	7	2	0	0	0	2	3	2	0	0	16	
FISCHER GERANIUMS, INC.																	
Patents By Year of Grant:	0	0	1	14	0	0	0	0	0	0	0	0	0	0	0	15	
Patents By Year of Application:	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
PLANT SCIENCES, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	4	1	2	2	0	1	4	1	15	
Patents By Year of Application:	0	0	0	0	0	4	2	1	2	0	0	1	4	1	0	15	
SAN JOAQUIN ROSE CO.																	
Patents By Year of Grant:	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
Patents By Year of Application:	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
		-	-	-	-	-	-	-	•	,		-	-	-	•		

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
CORNELL RESEARCH FOUNDATION INC.																	
Patents By Year of Grant:	1	2	1	1	2	1	1	0	2	0	2	0	1	0	0	14	
Patents By Year of Application:	4	3	0	0	2	0	2	1	0	2	0	0	0	0	0	14	
ENTHOVEN BREEDING B.V.	0	0	•	0	•	•	•	•	0	•	0	0	0	0	_	1.4	
Patents By Year of Grant: Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	8	8	0 6	0	6 0	14 14	
ratents by rear or application.	Ū	Ū	Ū	Ū	Ū	v	Ū	v	Ū	J	J	J	Ū	Ū	J		
MILESTONE AGRICULTURE INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	3	0	6	5	14	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	3	1	8	2	0	14	
O W GOODE AND SOUS SOUPLING																	
O. M. SCOTT AND SONS COMPANY	3	0	0	0	3	5	0	0	1		0	1	0	0	0	14	
Patents By Year of Grant: Patents By Year of Application:	3	0	3	3	2	0	1	0	1	1	0	0	0	0	0	14	
racence by rear or appricacion.	,	Ū	3	3		v	-	Ū	-	-	Ū	J	U	Ū	J		
OGLESBY PLANT LABORATORIES, INC.																	
Patents By Year of Grant:	0	0	0	0	0	1	0	1	0	2	2	0	1	3	4	14	
Patents By Year of Application:	0	0	0	0	1	0	1	2	0	2	0	1	6	1	0	14	
SAATZUCHT QUEDLINBURG GMBH							_										
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0 13	12 1	2 0	14	
Patents By Year of Application:	0	U	U	U	U	U	U	U	U	U	U	U	13	1	U	14	
BAY CITY FLOWER COMPANY, INC.																	
Patents By Year of Grant:	0	0	0	0	1	0	1	1	1	0	1	0	5	1	2	13	
Patents By Year of Application:	0	0	1	0	0	2	0	1	1	0	1	4	1	2	0	13	
CARLTON ROSE NURSERIES, INC.																	
Patents By Year of Grant:	5	1	1	0	1	1	1 2	0	2	0	0	0	0	1	0	13	
Patents By Year of Application:	6	1	1	0	1	1	2	0	0	U	U	1	0	0	0	13	
E. G. HILL CO., INC.																	
Patents By Year of Grant:	7	0	4	0	0	0	0	0	0	2	0	0	0	0	0	13	
Patents By Year of Application:	11	0	0	0	0	0	0	0	2	0	0	0	0	0	0	13	
J. FRANK SCHMIDT & SON CO.																	
Patents By Year of Grant:	0	0	1	0	1	0	1	4	0	1	0	2	0	0	3	13	
Patents By Year of Application:	1	1	0	0	1	2	2	0	1	0	2	0	0	3	0	13	
PLANT COMPANY																	
PLANT COMPANY  Patents By Year of Grant:	0	0	0	0	0	0	0	8	5	0	0	0	0	0	0	13	
Patents By Year of Application:	0	0	0	0	0	8	5	0	0	0	0	0	0	0	0	13	
									-								

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or 1	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
	_																
RESEARCH CORPORATION TECHNOLOGIES, IN		_				_		_		_		_					
Patents By Year of Grant:	0	0	0	0	0	1	4	6	0	1	0	1	0	0	0	13	
Patents By Year of Application:	0	0	0	1	0	10	0	1	0	0	0	1	0	0	0	13	
BLOOMS OF BRESSINGHAM LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	1	1	0	2	3	1	0	1	3	12	
Patents By Year of Application:	0	0	0	0	0	2	0	2	0	3	1	1	0	3	0	12	
GREEN CIRCLE GROWERS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	12	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	
HILVERDA B.V.																	
Patents By Year of Grant:	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	12	
Patents By Year of Application:	4	0	0	0	0	8	0	0	0	0	0	0	0	0	0	12	
ITO PACKING CO., INC.																	
Patents By Year of Grant:	0	0	0	0	1	2	4	0	2	1	0	1	1	0	0	12	
Patents By Year of Application:	0	0	1	2	3	1	2	1	0	0	1	1	0	0	0	12	
SIRI BROTHERS NURSERY, INC.																	
Patents By Year of Grant:	8	0	1	1	1	1	0	0	0	0	0	0	0	0	0	12	
Patents By Year of Application:	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
WIESMOOR-GARTNEREI UND BAUMSCHULE GMB	Ħ																
Patents By Year of Grant:	3	0	0	4	0	5	0	0	0	0	0	0	0	0	0	12	
Patents By Year of Application:	3	4	0	4	1	0	0	0	0	0	0	0	0	0	0	12	
CORN. BAK B.V.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	3	0	2	3	0	1	0	2	11	
Patents By Year of Application:	0	0	0	0	0	1	2	1	1	2	2	0	1	1	0	11	
FLORIDA FOUNDATION SEED PRODUCERS, IN	C.																
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	2	4	2	2	1	11	
Patents By Year of Application:	0	0	0	0	0	0	0	0	2	3	3	1	2	0	0	11	
FRUIT TREE RESEARCH STATION, MINISTRY				Y AND FI													
Patents By Year of Grant:	0	0	0	0	0	3	0	1	0	3	1	2	1	0	0	11	
Patents By Year of Application:	0	0	0	3	0	0	1	2	2	0	2	1	0	0	0	11	
HARTMAN PLANT LABORATORIES, INC.																	
Patents By Year of Grant:	0	0	0	0	0	6	2	3	0	0	0	0	0	0	0	11	
Patents By Year of Application:	0	0	0	6	0	5	0	0	0	0	0	0	0	0	0	11	

 Organizational Patenting	(Granted: Jan 01, 1977 - Dec 31, 1998)	- Ranked List of Organizations with 5 or More Patents	
organizacionar raccincing	(Grancea: Can CI, 1577 Dec SI, 1550)	Raintea hibe of organizacions with 5 of hore racenes	

Organizational Patenting				(Grante	ed: Jan (	1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
HER MAJESTY THE QUEEN IN RIGHT OF CAN	IADA, AS	REPRESEN	TED BY	THE MINIS	STER OF A	AGRICULTU	RE										
Patents By Year of Grant:	0	0	0	0	0	0	0	0	2	0	0	5	0	4	0	11	
Patents By Year of Application:	0	0	0	0	0	0	0	2	0	1	4	0	4	0	0	11	
INTER-PLANT PATENT MARKETING, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	3	1	3	0	4	0	0	11	
Patents By Year of Application:	0	0	0	0	0	3	0	2	2	0	0	4	0	0	0	11	
INTERNATIONAL PLANT BREEDING AG																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	
14001100 27 1041 01 11571104010111		•	•	·	•	•	•	·	·	•	·	•	·		•		
IOWA STATE UNIVERSITY RESEARCH FOUNDA	TION THE																
Patents By Year of Grant:	5	. 0	5	0	1	0	0	0	0	0	0	0	0	0	0	11	
Patents By Year of Application:	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	11	
racence by rear or application.	10	·	-	Ū	•	· ·	· ·	Ū	Ū	·	·	·	Ū	Ū	·		
JOSEPH H. HILL COMPANY																	
Patents By Year of Grant:	8	0	0	0	1	1	0	0	0	1	0	0	0	0	0	11	
	8	0	1	1	0	0	0	1	0	0	0	0	0	0	0	11	
Patents By Year of Application:	•	U	1	_	U	U	U	1	U	U	U	U	U	U	U	11	
L. DAEHNFELDT A/S																	
	•	•	•		_		•	•	•	•	•	•	_	•	0		
Patents By Year of Grant:	0 0	0 1	0 7	1 0	7 1	1 0	0 0	0	0	0	0	0 2	2 0	0	0	11 11	
Patents By Year of Application:	U	1	7	U	1	U	U	U	U	U	U	2	U	U	U	11	
RESEARCH CORPORATION	_				_	_	_			_				_			
Patents By Year of Grant:	3	0	2	0	6	0	0	0	0	0	0	0	0	0	0	11	
Patents By Year of Application:	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11	
SUN WORLD, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	3	0	4	0	0	0	1	3	11	
Patents By Year of Application:	0	0	0	0	0	0	3	2	2	0	0	0	4	0	0	11	
CHOPIN & WRIGHT NURSERY, LTD.																	
Patents By Year of Grant:	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Patents By Year of Application:	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
GEBR. VERWER																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	
H. P. METZLER & SONS, INC.																	
Patents By Year of Grant:	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	10	
Patents By Year of Application:	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	10	

Organizational Patenting				(Grante	ed: Jan (	1, 1977	- Dec 31,	, 1998)	R	Ranked Li	st of Or	ganizati	ons with	5 or	More Pat	tents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
HOFFGAARDE B.V.																	
Patents By Year of Grant:	0	0	0	0	0	0	2	0	0	0	1	7	0	0	0	10	
Patents By Year of Application:	0	0	0	0	0	2	0	0	0	0	8	0	0	0	0	10	
KNUD JEPSEN A/S	_	•													_		
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	4	0	6 0	10 10	
Patents By Year of Application:	U	U	U	U	U	U	U	U	U	U	U	4	5	1	U	10	
POULSEN ROSER APS																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	
-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -	-	-	-	_	,	-	-	-	-	-	-	-	-		,		
CLEARWATER NURSERY, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	2	2	3	0	2	9	
Patents By Year of Application:	0	0	0	0	0	0	0	0	1	1	2	3	2	0	0	9	
DENHOLM SEEDS, INC.																	
Patents By Year of Grant:	0	0	0	4	0	3	0	1	1	0	0	0	0	0	0	9	
Patents By Year of Application:	0	4	0	3	0	0	1	1	0	0	0	0	0	0	0	9	
GOLDSTOCK BREEDING LIMITED	_	•									_						
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	5 4	4 0	0	0	0	9 9	
Patents By Year of Application:	U	U	U	U	U	U	U	U	3	2	4	U	U	U	U	9	
MITSUWA NURSERY, INC.																	
Patents By Year of Grant:	0	0	3	0	0	1	1	3	0	1	0	0	0	0	0	9	
Patents By Year of Application:	0	3	0	0	1	3	1	1	0	0	0	0	0	0	0	9	
1400105 27 1041 01 11	· ·	J	•	·	_		_	_	·	•	•	•	·	•	·	-	
NATIVE PLANTS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	7	2	0	0	0	0	0	0	9	
Patents By Year of Application:	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9	
TWYFORD PLANT LABORATORIES, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	8	1	0	0	0	0	0	0	0	9	
Patents By Year of Application:	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9	
UNIVERSITY OF ARKANSAS																_	
Patents By Year of Grant:	0	0	0	0	0	3	0	0	0	4	0	0	0	2	0	9	
Patents By Year of Application:	0	0	0	3	0	0	0	0	4	0	0	1	1	0	0	9	
INITIOPOGTOV OF MINDEGODA THE PROPERTY OF																	
UNIVERSITY OF MINNESOTA, THE REGENTS OF Patents By Year of Grant:	2	0	0	0	0	1	3	0	1	1	0	0	0	0	1	9	
Patents By Year of Application:	2	0	0	0	4	0	1	1	0	0	0	0	1	0	0	9	
racence by rear or appricacion:	-	J	Ü	J	-1	Ū	-	_	Ü	Ū	Ü	J	-	Ū	3	,	

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
WEYERHAEUSER COMPANY																	
Patents By Year of Grant:	1	0	2	0	1	4	1	0	0	0	0	0	0	0	0	9	
Patents By Year of Application:	3	1	0	1	4	0	0	0	0	0	0	0	0	0	0	9	
CO-OPERATIVE ROSE GROWERS, INC.																	
Patents By Year of Grant:	0	0	1	1	0	3	1	0	2	0	0	0	0	0	0	8	
Patents By Year of Application:	2	0	0	2	1	1	0	2	0	0	0	0	0	0	0	8	
COLORADO STATE UNIVERSITY RESEARCH FO	UNDATION																
Patents By Year of Grant:	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8	
Patents By Year of Application:	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8	
FIDES, HANDELSKWEKERIJ																	
Patents By Year of Grant:	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8	
Patents By Year of Application:	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8	
INTERNATIONAL PLANT MANAGEMENT																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	
KENT'S BROMELIAD NURSERY, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	2	3	2	1	8	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	2	3	2	1	0	0	8	
NEW PLANTS																	
Patents By Year of Grant:	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	8	
Patents By Year of Application:	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	8	
PELARGONIEN-FISCHER KG																	
Patents By Year of Grant:	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Patents By Year of Application:	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
TREESEARCH (PARTNERSHIP)																	
Patents By Year of Grant:	4	1	2	0	0	0	0	0	0	0	0	0	0	0	1	8	
Patents By Year of Application:	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	
MACHINGRON CRAME INTURDITED PROPERTY		ON THE															
WASHINGTON STATE UNIVERSITY RESEARCH Patents By Year of Grant:	FOUNDATIO	ON, INC.	0	0	0	3	0	0	2	0	1	1	0	0	1	8	
Patents By Year of Application:	0	0	0	0	3	0	0	2	1	0	1	0	0	1	0	8	
- 100100 27 1001 01 1.FF1100010M.				, and the second	-		•	_	_		-	ŭ	· ·	_	•	-	
WOLFGANG BOCK PFLANZENEXPORT KG																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	3	3	2	0	8	

Organizational Patenting		(Grante	d: Jan 0	1, 1977	- Dec 31	, 1998)	R	anked Li	st of Or	ganizati	ons with	h 5 or More Patents					
	Pre								1000								
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
ADAMA GOVERNI AND GERM. TANG																	
ADAMS COUNTY NURSERY, INC.	0	0	•	•	-	4	•	•	•	•	•	•	•		-	-	
Patents By Year of Grant:	0	0	0 1	0	1 4	4	0	0	0	0	0	0 1	0	1 1	1	7 7	
Patents By Year of Application:	U	U	1	0	4	U	U	0	U	0	U	1	U	1	U	7	
BAILEY NURSERIES, INC.																	
Patents By Year of Grant:	2	0	0	0	0	1	0	0	0	1	1	0	0	1	1	7	
Patents By Year of Application:	2	0	0	0	1	0	0	1	1	0	0	0	1	1	0	7	
BALL FLORAPLANT																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	7	
Patents By Year of Application:	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	
BEGONIA BREEDERS ASSOC. B.V.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	
GROOT ASSOCIATES II																	
Patents By Year of Grant:	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7	
Patents By Year of Application:	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
L. DAEHNFELDT LTD.																	
Patents By Year of Grant:	4	2	0	0	0	0	0	0	1	0	0	0	0	0	0	7	
Patents By Year of Application:	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	
MIYOSHI & CO. LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	7	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	7	
racenes by rear or approaction.	•						•	•		•			•		•	,	
OMS INVESTMENTS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	1	1	4	1	7	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	1	2	4	0	0	7	
Pacenics by Tear Of Application:	U	U	U	U	U	U	U	U	U	U		2	4	U	U	,	
PLANTAS DE NAVARRA S.A.																	
							•		_		_				_	_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	2 3	0	3	0	2 0	0	0	7	
Patents By Year of Application:	U	0	0	0	0	0	2	0	3	0	0	2	0	0	0	7	
REEDLEY NURSERY, INC.																	
Patents By Year of Grant:	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Patents By Year of Application:	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
STATE OF ISRAEL, MINISTRY OF AGRICULT				_	_	_	_	_		_	_	_	_	_	_	_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	4	0	3	0	0	0	0	7	
Patents By Year of Application:	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	7	

---- Organizational Patenting (Granted: Jan 01, 1977 - Dec 31, 1998) ---- Ranked List of Organizations with 5 or More Patents ----

Organizational Patenting				(Grante	ea: Jan C	)I, 19//	- Dec 31	, 1996)	R	anked Li	st or or	ganizati	ons with	5 OF .	more Pat	tents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
STEWART ORCHIDS																	
Patents By Year of Grant:	0	0	0	0	1	3	2	0	0	1	0	0	0	0	0	7	
Patents By Year of Application:	0	0	1	1	3	1	0	1	0	0	0	0	0	0	0	7	
1400105 27 1041 01 1-5-1104010111	·	•	_	_	•	_	·	_	•	·	•	·	· ·	•	•	•	
UNIVERSITY OF ILLINOIS																	
	•	_	_	•	•	_	•	_				•	_			_	
Patents By Year of Grant:	2	2	2	0	0	0	0	0	0	1	0	0	0	0	0	7	
Patents By Year of Application:	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7	
AGROPLANT-SELECT BV																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	
ASTERKLUBBEN																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	
BURCHELL NURSERY, INC.																	
Patents By Year of Grant:	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1	6	
Patents By Year of Application:	4	1	0	0	0	0	0	0	0	0	0	0	0	1	0	6	
racence by rear or Apprication:	*	1	U	U	U	U	U	U	U	U	U	U	U		U	6	
DENACHTVLINDER B.V.		_												_		_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	6	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	2	0	0	4	0	0	6	
ELSNER PAC JUNGPFLANZEN																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	6	
ESTABLISSEMENTS BARBERAT ET BLANC, LA	BORATOIR	E DE PHY	SIOLOGI														
Patents By Year of Grant:	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	6	
Patents By Year of Application:	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	6	
GEO. W. PARK SEED CO., INC.																	
Patents By Year of Grant:	0	0	0	1	0	3	0	0	0	0	0	0	0	0	2	6	
Patents By Year of Application:	0	1	0	3	0	0	0	0	0	0	0	0	2	0	0	6	
racenes by rear or appricacion:	U	_	J	3	J	J	U	U	U	U	U	U	4	U	J	v	
HILLEON ODGIVANDS & NUMBERTES TOS																	
HILLTOP ORCHARDS & NURSERIES, INC.																	
Patents By Year of Grant:	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Patents By Year of Application:	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
KLEHM BOYS PARTNERSHIP																	
Patents By Year of Grant:	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Patents By Year of Application:	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	

Organizational Patenting				(Grante	d: Jan 0	1, 1977	- Dec 31,	, 1998)	R	anked Li	st of Or	ganizati	ons with	5 or 1	More Pat	ents	
	Pre																
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
KOALA BLOOMS PTY. LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	
METZLER INVESTMENTS																	
Patents By Year of Grant:	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	6	
Patents By Year of Application:	0	1	1	0	4	0	0	0	0	0	0	0	0	0	0	6	
NATIONAL SEED DEVELOPMENT ORGANISATION	N LIMITE	)															
Patents By Year of Grant:	4	0	1	0	0	1	0	0	0	0	0	0	0	0	0	6	
Patents By Year of Application:	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	
ROSES BY FRED EDMUNDS, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	6	
Patents By Year of Application:	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	6	
SAKATA SEED AMERICA, INC.																	
Patents By Year of Grant:	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	6	
Patents By Year of Application:	0	0	0	2	1	0	0	0	0	0	0	0	3	0	0	6	
BIOTECH PLANTS PTY. LTD.																	
Patents By Year of Grant:	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	
Patents By Year of Application:	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	
BODGER SEEDS, LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	5	
CARLTON NURSERY COMPANY, INC.																	
Patents By Year of Grant:	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Patents By Year of Application:	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
CHAS. KLEHM & SON																	
Patents By Year of Grant:	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5	
Patents By Year of Application:	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	
/																	
CP (DELAWARE), INC.				_	_	_	_		_	_			_		_	_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	
D. S. COLE GROWERS, INC.														_	_	_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	5	

Organizational Patenting				(Grante	d: Jan (	1, 1977	- Dec 31	, 1998)	F	anked Li	st of Or	ganizati	ons with	5 or	More Pat	cents	
	Pre	1005	1000	1007	1000	1000	1000	1001	1000	1002	1004	1005	1006	1007	1000	moma r	
	1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL	
DELEON'S BROMELIAD WORLD, INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3	5	
Patents By Year of Application:	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	5	
ETABLISSEMENTS BARBERET ET BLANC																	
Patents By Year of Grant:	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5	
russing by roar or impression.	· ·	· ·	· ·	· ·	•	-	•	•		•	·	· ·	•	•	·	-	
FLOWERWOOD NURSERY INC.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	1	1	3	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	1	1	1	2	0	0	0	5	
FRAMPTONS NURSERIES LIMITED	_	_														_	
Patents By Year of Grant:	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	5	
Patents By Year of Application:	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5	
GEBR. MAN C.V.																	
Patents By Year of Grant:	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	5	
Patents By Year of Application:	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	5	
1400100 27 1041 01 1	· ·	· ·	· ·	· ·	•	-	•	•		•	·	· ·	•	•	·	-	
H. DE MEYER - DE ROUCK B.V.B.A.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	5	
HINES NURSERIES INC.																_	
Patents By Year of Grant:	0	0	0	0	0	0	0	3	0	0	1	1	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	3	0	0	1	0	1	0	0	0	0	5	
HOKUETSU NOHJI CO., LTD.																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	
M. LEK EN ZONEN, B.V.																	
Patents By Year of Grant:	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	5	
Patents By Year of Application:	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	
MT. HOOD LILIES, INC.																_	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	
NEW WORLD PLANTS USA																	
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	5	
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	5	
	_	_	•	•			•		•	_			-		•	_	

Organizational Patenting	Organizational Patenting			(Granted: Jan 01, 1977 - Dec 31, 1998)						Ranked List of Organizations with					5 or More Patents			
	_																	
	Pre 1985	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL		
	1703	1703	1500	1507	1,00	1505	1330	1771	1,,,,	1333	1,,,,	1,7,5	1330	1007	1330	1011111		
OREGON BULB FARMS, INC.																		
Patents By Year of Grant:	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	5		
Patents By Year of Application:	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5		
ROYAL SLUIS B.V.																		
Patents By Year of Grant:	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5		
Patents By Year of Application:	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5		
SWEETBRIAR DEVELOPMENT INC.																		
Patents By Year of Grant:	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	5		
Patents By Year of Application:	0	0	0	0	0	0	0	2	0	0	1	2	0	0	0	5		
UNIVERSITY OF CONNECTICUT																		
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	5		
Patents By Year of Application:	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5		
	_																	
UNIVERSITY OF FLORIDA BOARD OF REGENTS		•	•	•	•	•	•	-	•		-	•	•	•	•	_		
Patents By Year of Grant:	0	0	0	0	0	0 1	0 1	1 1	2 2	1 0	1 0	0	0	0	0	5 5		
Patents By Year of Application:	U	0	0	U	U	1	1	1	2	U	U	U	U	0	U	5		
UNIVERSITY OF TENNESSEE RESEARCH CORPO	^D 7 TT CNT																	
Patents By Year of Grant:	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5		
Patents By Year of Application:	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5		
racenes by rear or approaction.	· ·		•	· ·	,	•	· ·	•	· ·	•	•	•	•	· ·	· ·	<u> </u>		
YOVAL AGRICULTURAL PRODUCTS LTD.																		
Patents By Year of Grant:	0	0	0	0	0	0	0	0	0	1	1	0	3	0	0	5		
Patents By Year of Application:	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	5		
	-	-	-	-	-	-		_	-	-		-		-		-		
Other Organizations (384)																		
Patents By Year of Grant:	105	11	22	9	49	42	30	30	27	39	50	32	36	57	69	608		
Patents By Year of Application:	138	17	35	31	30	38	32	37	33	30	35	64	63	25	0	608		