CONTAINERIZED SEEDLING PRODUCTION STATISTICS FOR ONTARIO, 1985

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under the auspices of the

CONTAINER STOCK WORKING GROUP OF THE

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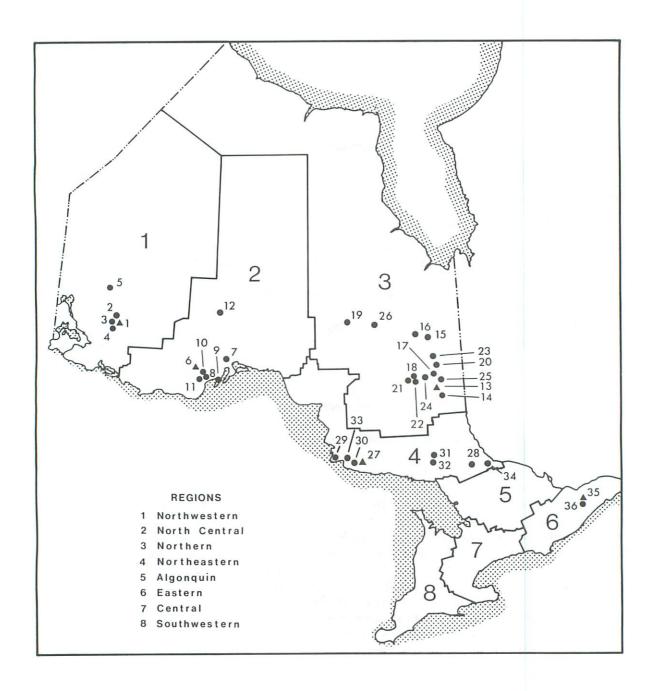
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ABSTRACT

In calendar year 1985, five provincial crown and 31 private nurseries produced a total of 87.6 million containerized tree seedlings for use in Ontario's reforestation program, an increase of 15% over the previous year. This represents 55% of total provincial planting stock production for 1985, the output of containers exceeding that of bare-root stock for the second year in succession. Private nurseries under contract to the crown grew 78 million seedlings, or 89% of all containers produced, mostly in the four northern regions of the province. The two principal species grown in containers were jack pine and black spruce, accounting for 52% and 45% of production, respectively. Almost 85% of all seedlings were grown in the Japanese paperpot. Statistics are presented to contrast production of containerized and bare-root stock by administrative region, nursery, and species.

RÉSUMÉ

En 1985, 5 pépinières provinciales et 31 pépinières privées ont produit en tout 87,6 millions de plants d'arbres en contenants pour le programme de reboisement de l'Ontario; cette production dépasse de 15% celle de l'année précédente et représente 55% de la production totale de 1985. C'est la deuxième année consécutive qu'on produit plus de plants en contenants que de plants à racines nues. Les pépinières privées ont produit 78 millions de plants pour le compte du gouvernement provincial, soit 89% des plants en contenants; la plupart de ces pépinières sont situées dans une des quatre régions du nord de la province. Le pin gris, représentant 52% de la production, et l'épinette noire, représentant 45%, sont les deux principales espèces produites en contenants. Presque 85% des plants en contenants ont été cultivés dans des pots de carton japonais. On présente des statistiques comparatives sur la production de plants en contenants et la production de plants à racines nues en fonction de la région, de la pépinière et de l'espèce.



Frontispiece. Container production nurseries in Ontario, 1985. (Large numbers indicate administrative regions; small numbers indicate locations of nurseries listed in Table 4, viz:

_ provincial crown nurseries, _ private sector nurseries.)

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Cover photo: Black spruce seedlings being moved from greenhouse to outdoor shade area at La Maison Verte, Hearst.

PRODUCTION HIGHLIGHTS

In Ontario, as in most other regions of Canada, the 1980s have witnessed a dramatic expansion in the production and planting of containerized tree seed-This expansion has been given impetus by the demands for substantially increased forest renewal. Concurrently with the expansion of planting programs, responsibility for the production and planting of container stock has undergone Since 1982, 28 Forest Management Agreements (FMAs) have been negotiated between the province of Ontario and forest products companies, so that responsibility for forest management, and specifically much of the increase in reforestation, has been effectively transferred to the companies. Under the terms of these agreements the Ontario Ministry of Natural Resources (OMNR) is responsible for providing the planting stock used in FMA reforestation programs, and most of this is currently container-grown. To meet the need for planting stock, a policy of privatizing additional container production was implemented in 1982, when the first private nurseries began growing containerized seedlings under contract to OMNR. Since that time, production contracts have been negotiated with private growers in all northern regions of the province.

This is the fourth in a series of annual reports summarizing containerized seedling production statistics for the province of Ontario. For the last report year, 1984, total production of container stock amounted to 81.5 million seedlings, or 57% of total planting stock production (142.8 million trees). The bulk (86%) of this container stock was grown in 26 private greenhouses.

Total planting stock production, of all stock types, continued to rise in 1985 (Fig. 1), although somewhat more slowly than in 1984, reaching a record

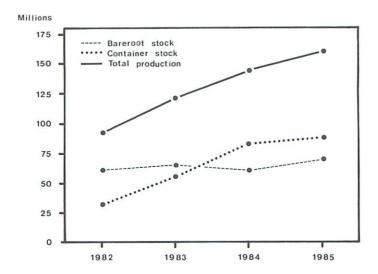


Figure 1. Containerized and bare-root planting stock production for the years 1982 to 1985 (millions of trees).

158.9 million trees. This represents an increase of 11.3% over the previous year's figure, and more than a 72% increase since 1982. Production of bare-root stock, after a temporary decline in 1984, returned to its former level and showed a modest upward trend (a 6.5% increase over 1983) to 68.8 million trees. However, for the second consecutive year, bare-root production was again surpassed by the output of container stock.

While container production again showed an increase, the rate of increase was much reduced from 1983 and 1984 (Fig.1). At 87.6 million seedlings, output was 15% higher than in 1984, and accounted for 55% of total provincial planting stock production (down slightly from 57% in 1984). These are averages for the province as a whole; Table 5 shows that 99% of all container stock was grown in the four northern regions of the province (Northwestern, North Central, Northern, Northeastern), where the proportion of containerized seedlings was frequently substantially higher than the provincial average (range 58% to 93%; average 67%).

The number of private nurseries producing containerized tree seedlings increased from 26 to 31 in 1985, principally through the addition of new growers in the Northeastern Region. These 31 nurseries, with a total greenhouse floor-space of approximately $66,000~\text{m}^2$, produced 89% of all container stock grown in the province (78 million seedlings). While this represents an 11% increase in private-sector output over the previous year, their overall share of container production remained fairly stable (Fig. 2). The frontispiece and Table 6 show that most (77%) of this private sector production was again centered in the Northern and North Central regions.

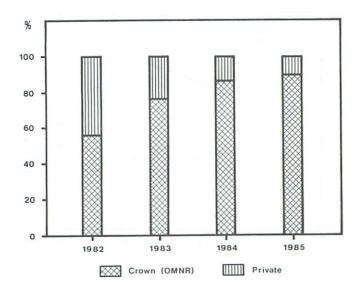


Figure 2. Distribution of container production between crown and private nurseries, 1982-1985.

Statistics for container production by species (Table 7) reflect the importance of container planting in boreal reforestation programs. The two principal species grown are jack pine (Pinus banksiana Lamb.) and black spruce (Picea mariana [Mill.] B.S.P.) which, in 1985, accounted for 52% and 45% of total container production, respectively. White pine (Pinus strobus L.) again occupied third place at 1.5%.

The Japanese paperpot continued to be the most widely used container, increasing its share slightly to 85% of all container stock grown in the province in 1985 (Fig. 3). With the exception of the crown nursery at Thunder Bay (No. 6, Table 4), which uses Can-Am multipots, the paperpot system is used for all crown and private container production in the North Central, Northern and Northeastern regions. In the fourth northern region, Northwestern, the Spencer-Lemaire "Rootrainer" is used exclusively.

Most of the data for this report were supplied by CMNR members of the Container Stock Working Group of the Canada-Ontario Joint Forestry Research Committee. Data for the Central and Southwestern regions were provided by the respective nursery superintendants at Midhurst, Orono and St. Williams. The assistance of all contributors is gratefully acknowledged.

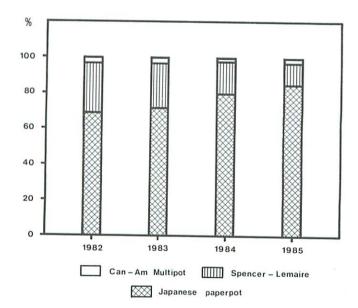


Figure 3. Container system use, 1982-1985 (as a percentage of total container stock production).

EXPLANATORY NOTES ON TABLES

- 1. All data are for calendar year 1985. Container stock production is presented in terms of the total number of cavities sown and numbers of shippable seedlings produced. The latter include seedlings produced in 1985 for shipping in the current year (1985) or for overwintering and shipping the following spring (1986). They do not include seedlings overwintered from 1984 and shipped in the spring of 1985. Data for bare-root production include only those seedlings shipped during calendar year 1985.
- 2. Data for container production exclude containerized seedlings used in the production of accelerated bare-root transplant stock.
- 3. Accelerated bare-root transplant data (Accel. transplants; tables 5-7) include production from both containerized and bare-root seedlings.

4. NURSERY OWNERSHIP

All container production reported was carried out in provincial crown (i.e., OMNR) or private sector nurseries under contract to OMNR. Only those private nurseries with seedling production contracts in 1985 are reported here. There were no container nurseries operated by the forest industry in Ontario in 1985.

5. CONTAINER NURSERY DIRECTORY (TABLE 4)

The following information precedes the entry for an individual nursery:

- nursery number (same sequence as on frontispiece map)
- (C) or (P) indicates crown or privately operated nursery, respectively
- mailing address (the address of the owner, and not necessarily the nursery location)
- name of nursery superintendent (OMNR) or owner
- telephone number

¹ The use of "shippable seedlings produced" rather than "seedlings shipped" has been adopted in order to give an accurate portrayal of container nursery production on a crop-year basis. This approach avoids the problem of seedlings produced to acceptable standards but for some reason not shipped (inherent in the reporting of "seedlings shipped"), and serves better to quantify actual nursery productivity in a given year.

- container system used and percentage of use:

PP4 - FH408 Japanese paperpot PPS3 - FS308 Japanese paperpot PPS4 - FS408 Japanese paperpot

GH20 - Combicell GH20

SLF - Spencer-Lemaire "Ferdinand"

MP1 - Can-Am Multipot 1

MP104 - Can-Am Multipot RS104

For each nursery entry:

 greenhouse description, within parentheses, follows figure for greenhouse capacity, viz:

1st letter (greenhouse style)

F - free standing

G - gutter connected

2nd letter (greenhouse cover material)

f - fiberglass or rigid plastic

g - glass

p - polyethylene

3rd letter (heating method)

a - forced air/oil

b - forced air/propane

c - forced air/natural gas

d - forced air/gas waste heat

e - hot water/oil

f - hot water/propane

g - hot water/natural gas

h - hot water/wood

- * An asterisk following the greenhouse description indicates that at least part of the growing facility has blackout curtains for operationally controlling (reducing) daylength.
- species abbreviations:

bS - black spruce (Picea mariana [Mill.] B.S.P.)
wS - white spruce (Picea glauca [Moench] Voss)
jP - jack pine (Pinus banksiana Lamb.)
rP - red pine (Pinus resinosa Ait.)
wP - white pine (Pinus strobus L.)

(Larix spp.)

L - larch

OC - other conifers

H - hardwoods

- crop schedule:

This provides an estimate of (1) the percentage of current and overwinter production for each species, based on cavities sown, and (2) the average length of production period for each growing regime, calculated on the basis of the number of weeks between sowing and shipping.

Table 1. Summary of greenhouse capacities for containerized seedling production by region and ownership category, 1985

	OMNR ca	OMNR capacity ^a		capacity	Total capacity	
Region	Area (m²)	%	Area (m²)	%	Area (m ²)	
Northwestern	2 408	29.2	5 827	70.8	8 235	
North Central	2 200	11.8	16 455	88.2	18 655	
Northern	4 700	11.5	36 261	88.5	40 961	
Northeastern	4 491	40.2	6 690	59.8	11 181	
Eastern	1 200	61.9	740	38.1	1 940	
Central ^b	2 015	100.0	=	-	2 015	
	17 014	20.5	65 973	79.5	82 987	

Whereas private greenhouses produced only container stock, several OMNR nurseries used their greenhouses principally for cuttings and the production of seedlings for accelerated bare-root stock.

b Orono nursery

Table 2. Summary of container system use (cavities sown) by region, 1985.

Region	Spencer- Lemaire	Japanese paperpot	Can-Am Multipot		
	('000	cavities sown)			
Northwestern	11 272	-	-		
North Central	-	27 792	2 413		
Northern	-	45 759	-		
Northeastern	=	15 409	-		
Eastern	-	-	919		
	11 272	88 960	3 332		
% of total	10.9	85.9	3.2		

Table 3. Summary of container system use (shippable seedlings produced) by region, 1985.

Region	Spencer- Lemaire	Japanese paperpot	Can-Am Multipot	
	('00	0 shippable seed	lings)	
Northwestern	10 681	-	-	
North Central	-	23 141	1 752	
Northern	-	38 151	-	
Northeastern	-	13 595	-	
Eastern	-	-	909	
	10 681	74 887	2 661	
% of total	12.1	84.9	3.0	

Table 4.	Container	production	nurseries	by	region	

Greenhouse capacity (m ²),		Seedling production	Seedling production	Crop schedule	
style, and heating method		('000 cavities sown)	('000 shippable seedlings)	Current	Over- wintered
NORTHWESTERN REGION					
	1(C) DRYDEN TREE P.O.	NURSERY, ONTARIO BOX 90, WABIGOON,	MINISTRY OF NATURAL RES	SOURCES,	
	[Malc	olm McIntyre. Tel	. (807) 938-6326]		
		[SLF-100	%]		
2408 (Fpa/b)*	jP bS	2027	- 1913	-	100/54
		2027	1913		
		DRYDEN, ONTARIO	RR#1, SITE 28 BOX 20, , P8N 2Y4 1. (807) 937-5381]		
		[SLF-100	*]		
670 (Fpb)	jP bs	1380	1291	50/14	50/46
		1380	1291		
	3(P) EVER	RGREEN FARMS, 48 P	RINCESS STREET, DRYDEN, N 1C7		
	[Cha	rles Queau. Tel.	(807) 937-5239]		
		[SLF-100	*]		
2062 (Fpc)	jP bS	2258 731	221 0 636	61/15	39/46 100/46
		2989	2846		
	4(P)	TAMARAC NURSERIES ONTARIO, P	LTD., RR#2, DRYDEN, 8N 2Y5		
	[1]	David Lick. Tel.	(807) 937–6621]		
		[SLF-100	£]		
1445 (Fpa/b)	jP 1	380	1359	50/15	50/46
	1	380	1359		

Table 4.	Container	production	nurseries	by	region	(cont'd).
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Table 4. Container produ					
Greenhouse	Seedling production		Seedling production	Crop schedule	
capacity (m ²), style, and heating method		('000 cavities sown)	('000 shippable seedlings)	Current crop	Over- wintere
	5(P)	WELLAIR CONCEPTS EAR FALLS, ONTAR	INC., P.O. BOX 339, IO, POV 1TO		
	[c	Gordon Hicks. Tel.	(807) 222-2325]		
		[SLF-100	%]		
1650 (Fpc)	jP bS	890 2606	850 2422	50/14	50/46 100/52
		3496	3272		
NORTH CENTRAL REGION					
((0)	HINDED DAY DO	OD DOM CHAMTON ONTO	DIO MINISTRO V OF NATURAL	DECOMPORE	
6(0)		R#1, THUNDER BAY, O	RIO MINISTRY OF NATURAL NTARIO, P7C 4T9	RESOURCES,	
	[B	ob Klapprat. Tel.	(807) 939-2561]		
		[MP104-10	00%]		
2200 (Fpc)*	jP bS	1306 1107	1246 506	100/16	100/52
		2413	1752		
	7(P)	A & R GREENHOUSES ONTARIO, PO	LTD, RR#1, HURKETT,		
	[Frank Rau	er and John Asperja	n. Tel. (807) 857-2471	1	
		[PP4-100	1%]		
2007 (Fpc)	jР	1304	557	_	100/52
	bS			1-	_
		1304	557		
	8(P)	CREEKSIDE NURSERY, ONTARIO, P7	RR#11, THUNDER BAY, 'B 5E2		
	[Denn	is Trevisanutto. T	el. (807) 345-3131]		
		[PP4-100	[*]		
3211 (Fpc)	jP bs	1042 5366	627 4423	- 64/20	100/52 36/52

Table 4.	Container	production	nurseries	by	region	(cont'd)
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Greenhouse capacity (m^2) ,	Seedling production		Seedling production	Crop schedule	
style, and heating method	('0	00 cavities sown)	('000 shippable seedlings)	Current crop	Over- wintered
	9(P) GR	UNDY'S NURSERIE ONTARIO, PO	ES LTD., PASS LAKE, DT 2M0		
	[Errol	Grundy. Tel.	(807) 977-2832]		
		[PP4-100	0.8]		
2408 (Fpc)	jP bS	21 29 21 26	1978 1960	100/16	- 100/52
		4255	3938		
		REENHOUSES LTD. UNDER BAY, ONTA	, OLIVER ROAD, MURILLO,		
Ţ	Hermann Vanduy	n and Ralph Mee	ems. Tel. (807) 935-262	6]	
		[PP4-100	1.		
		1. Production	for Crown		
3612 (Fpc)	jP bS	1526 5476	1500 5169	100/16 31/20	- 69/52
		7002	6669		
	2. Pr	oduction for Ab	itibi-Price Inc.		
	jP bS	630	61 3	100/16	-
		630	613		
	11(P) HODWIT	Z ENTERPRISES L ONTARIO, P7	TD., RR#6, THUNDER BAY, C 5N5		
	[Jim and	Dan Hodwitz. T	el. (807) 939-6027]		
		[PP4-100	%]		
3612 (Fpc)	jP bs	4348 2541 6889	4157 1600 ——————————————————————————————————	81/16 -	19/52 100/52

Table 4.	Container	production	nurseries	by	region	(cont'd)	
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Greenhouse	Seed: produc		Seedling production		op dule
capacity (m²), style, and heating meth∞d	('000 c		('000 shippable seedlings)	Current	Over- wintered
			PRONG LTD., P.O. BOX 1	64,	
	[Ted Nei	11. Tel.	(807) 583-2477]		
		[PP4-100	0.8]		
1605 (Fpc)	jP 13 bs	04	557 -	-	100/52
	13	04	557		
NORTHERN REGION					
13(C)	SWASTIKA FOREST STAT P.O. BOX 129	ION, ONTAR	IO MINISTRY OF NATURAL , ONTARIO, POK 1TO	RESOURCES,	
	[Lucien J. Fo	rcier. Te	1. (705) 567-3372]		
		[PP4-100	0%]a		
722 (Gfb) 3978 (Fpb)			jP 80 bs 39 L 16 ∞ 10	10/20 100/20 100/20 100/20	90/52
			145		
	14(P) AIDIE CREEK GAR	RDENS, RR#3	, ENGLEHART, ONTARIO,	РОЈ 1НО	
	[Charles Wa	rner. Tel	. (705) 544-2474]		
		[PP4-10	0%]		
4375 (Fpb)*	1570	000 119	728 2157	2	100/45 100/50
	34	119	2885		
15	(P) BIRCHILL NURSERIE	S INC., RR	#2, COCHRANE, ONTARIO	, POL 1CO	
	[J. Russell S	Skidmore.	Tel. (705) 272-3944]		
		[PP4-10	0%]		
2890 (Fpb)	jP bS 24	- 119	2249	-	100/50
	2.4	419	2249		

a Special tree improvement stock

Table 4. Container production nurseries by region (cont'd	Table 4.	Container	production	nurseries	by	region	(cont'd
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Greenhouse capacity (m ²),	Seedling production	Seedling production		op dule
style, and heating method	('000 caviti sown)	es ('000 shippable seedlings)	Current crop	Over- wintere
	16(P) BLAZECKA'S GREENHOUSE	r, RR#2, COCHRANE, ONTARIO, P	OL 1C0	
		Tel. (705) 272-3915]		
	[P	P4-100%]		
2815 (Fpc)	jP 250 bS 2000	165 1414	-	100/45 100/50
	2250	- 1579		
		ES INC., P.O. BOX 329, SWAST IO, POK 1TO	IKA,	
	[Gilbert Levangie	. Tel. (705) 642-3426]		
	[P	P4-100%]		
4680 (Gpd)	jP 7107 bS 813	6199 544	56/14	44/45 100/50
	7920	6743		
		S LTD., RR#2, AIRPORT ROAD, ONTARIO, P4N 7C3		
	[Richard Lafleur	. Tel. (705) 268-2323]		
	[PP4-99.	3%; GH20-0.7%]		
4830 (Gpg)	jP 4699 bs 3500	4174 2922	57/14 41/18	43/45 59/50
	8199	7096		
		T 29, CONCESSION 10, GIRARD BEARST, ONTARIO, POL 1NO	ROAD,	
		y. Tel. (705) 362-7040]		
	f b	P4-100%]		
1526 (Gpg)	jP 585 bS 1904	463 1098	100/14 37/18	- 63/50
	2489	1561		

Greenhouse capacity (m ²),	Seedling production	Seedling production	Crop schedule	
style, and heating method	('000 cavities sown)	('000 shippable seedlings)	Current	Over- wintere
	20(P) LAVA MOUNTAIN LTD., ONTARIO, PO			
	[Don Boothe. Tel.	(705) 236-4287]		
	[PP4-100	0%]		
2005 (0)+	i n			
2985 (Ggg)*	jP - bS 5000	3772	50/18	50/50
	5000	3772		
	21(P) M. KEAN RESOURCES TIMMINS, ONTAR			
	[Mark Kean. Tel.			
	[PP4-100	0%]		
1115 (Gpg)	jP 758 bs -	529	100/14	-
	758	529		
	22-23(P) MILLSON FORESTRY SI),	
	RR#1, TIMMINS, ON			
	[David Millson. Tel.			
	[224-100	2.61		
1908 (Ffh) -	jP 1676 bS 851	1511 823	32/14 100/18	68/45
	2527	2334	100/18	-
		2331		
24(P) 1	NORTHERN GREENHOUSE FARMS LTD	[1] [1] [2] [2] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4	JITE 402,	
	TIMMINS, ONTARI			
	[Stanley M. Deluce. Te			
	[224-100	, 01		
5316 (Gph)	jp 5309 bs 2230	4549 1998	23/14 100/18	77/45
	7539	6547	, 30/10	-

Table 4. Container production nurseries	by	by	region	(cont'd)
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Greenhouse capacity (m ²),	Seedling production	Seedling production		op dule
style, and heating method	('000 cavities sown)	s ('000 shippable seedlings)	Current crop	Over- wintered
25		LTD., 75 GOVERNMENT ROAD	WEST,	
	[Abe Aidelbaum.	Tel. (705) 567-5646]		
	[PP4-929	s; GH20-8%]		
2891 (Fpb)*	jP - bS 2419	- 2056	-	100/50
	2419	2056		
930 (Gpg)	j₽ −	I-100%]b		
	bS 820	655	38/16	62/50
NORTHEASTERN REGION	820	655		
27(C) Ti		TARIO MINISTRY OF NATURAL SALON, ONTARIO, POR 1L0	RESOURCES,	
	[Glenn Connell.	Tel. (705) 842-3634]		
	[PP4	1-100%]		
4491 (Fpe/f)	jP 3482 rP 522 wP 400 bS 960 L 22 HC 88	31 35 435 325 885 20 80	48/14 - - - 100/14	52/46 100/48 100/48 100/58

5474

4880

b Black spruce seedlings grown from cuttings c White birch (Betula papyrifera Marsh.)

mahla A	Containor	production	nurgeries	hv	region	(cont'd)	
Table 4	Container	production	nur ser res	DY	redron	(COILC U)	

Greenhouse		Seedling roduction	Seedling production	Crop schedule	
capacity (m ²), style, and heating method	('00	00 cavities sown)	('000 shippable seedlings)	Current	Over- wintered
	28(P) AQUANORTI	H FARMS INC., I	P.O. BOX 390, NORTH BAY		
	[Gerry		(705) 472-4709]		
		[PP4-10	0%]		
1908 (Gpg)	jP rP wP	2757 299 120	2480 250 100	44/14 - 100/15	56/46 100/46
	bs ws	62	56	-	100/60
		3238	2886		
			NTARIO, P6A 6N1 . (705) 779-2168]		
		[PPS4-80%; P	PS3-20%]		
2808 (Fpg)	jP wP bS	3000 152 655	2670 137 580	40/14 100/17 9/14	60/47 - 91/60
		3807	3387		
		ONTARIO, P			
	[Amy-Je	(PP4-10	1. (705) 785-3788] 0%)		
536 (Fpb)	jР	676	610	36/10	64/49
	bS	192	170	100/13	-
		868	780		

Table 4. Container production nurseries by region (cont'd)

Greenhouse capacity (m ²),		ling ction	Seedling production	Crop schedule	
style, and heating method	('000 cavities sown)		('000 shippable seedlings)	Current	Over- wintered
	31(P) SANDERS GREEN CHELMS	HOUSES INC. FORD, ONTAR	, 2150 HWY. 144, R.R. #3 IO, POM 1LO		
	[Charles Sa	nders. Tel	. (705) 855-4380]		
		[PP4-100	*]		
536 (Fpa)	bS wS 2	26 - 34 60	580 - 220 	30/12 - 100/16	70/48 - -
		ONTARIO, PO	(705) 855-4487]		
356 (Fpc)	bs -	66 - 	295 - 295	48/13	52/46 -
		PLANT, DEPLO	ONTY ROAD, BRUCE MINES, R 1CO		
	[Robert Lawn	ence. Tel	. (705) 782-6677]		
		(PP4-1009	b]		
335 (Fpb/F)	jP 41 bs - 	-	360 - 360	53/12	47/48 -

Table 4. Container	production	nurseries	by	region	(concl.)
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Greenhouse capacity (m ²),		edling oduction	Seedling production	Crop schedule	
style, and heating method	('000 cavities sown)		('000 shippable seedlings)	Current crop	Over- wintered
	34(P) WI	EBB'S FARM, R.	R. #1, RONFIELD, DM 1EO		
	[Alfred	d Webb. Tel.	(705) 776-2506]		
		(PP4-100	0%)		
211 (Fpe)	jP bS	384	207	50/12	50/49 -
		384	207		
EASTERN REGION					
3			TION, ONTARIO MINISTRY O	F NATURAL	
3	RESOURCES,	RR#4, KEMPTVII		F NATURAL	
3	RESOURCES,	RR#4, KEMPTVII	LLE, ONTARIO, KOG 1J0 . (613) 258-3413]	F NATURAL	
1200 (Fpa)	RESOURCES, I	RR#4, KEMPTVII ampbell. Tel [MP1-100	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%]	100/16	94./49
	RESOURCES, I [A.J. Ca jP wP	RR#4, KEMPTVII ampbell. Tel [MP1-100	LLE, ONTARIO, KOG 1J0 . (613) 258-3413]	100/16 16/20	- 84/48 -
	RESOURCES, I	RR#4, KEMPTVII ampbell. Tel [MP1-100	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%]	100/16	- 84/48 -
	PESOURCES, I	24 425 10 24 80	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79	100/16 16/20 100/20	- 84/48 - - -
	PESOURCES, I	24 425 10 24	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24	100/16 16/20 100/20 100/20	- 84/48 - - -
	PESOURCES, I	24 425 10 24 80	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79	100/16 16/20 100/20 100/20	84/48 - - -
	PRESOURCES, I	24 425 10 24 80 6 569 ERIES LTD., K	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79 6	100/16 16/20 100/20 100/20 100/16	84/48 - - -
	PRESOURCES, I	24 425 10 24 80 6 569 ERIES LTD., K	23 423 9 24 79 6 — 564 EMPTVILLE, ONTARIO, KOG (613) 258-3053]	100/16 16/20 100/20 100/20 100/16	- 84/48 - - -
	RESOURCES, DEPARTMENT OF THE PROPERTY OF THE P	24 425 10 24 80 6 569 ERIES LTD., K Walsh. Tel.	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79 6	100/16 16/20 100/20 100/20 100/16	- 84/48 - - -
1200 (Fpa)	RESOURCES, I [A.J. Ca jP wP bs ws L CC 36(P) WALSH NURS [Irvin jP wP	24 425 10 24 80 6 569 ERIES LTD., K Walsh. Tel.	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79 6 564 EMPTVILLE, ONTARIO, KOG (613) 258-3053] 0%]	100/16 16/20 100/20 100/20 100/16	84/48
1200 (Fpa)	RESOURCES, DEPARTMENT OF THE PROPERTY OF THE P	24 425 10 24 80 6 569 ERIES LTD., K Walsh. Tel.	LLE, ONTARIO, KOG 1J0 . (613) 258-3413] 0%] 23 423 9 24 79 6	100/16 16/20 100/20 100/20 100/16	84/48

Table 5. Summary of planting stock production, all sources, for calendar year 1985 by region and type ('000 shippable seedlings)

	Conta	inerized	Bare	e-root	Accel.	transplants	Cu	Total	
Region	Number	% of total	Number	% of total	Number	% of total	Number	% of total	production
Northwestern	10 681	71.1	4 000	26.6	350	2.3	-	-	15 031
North Central	24 893	70.9	10 220	29.1	-	-	1	-	35 114
Northern	37 496	57.8	19 507ª	30.1	7 142	11.0	705	1.1	64 850
Northeastern	13 595	93.4	948	6.5	-	-	20	0.1	14 563
Eastern	909	9.5	7 235	75.7	-	-	1 415	14.8	9 559
Central	-	-	12 918 ^b	99.0	22	0.2	113	0.8	13 053
Southwestern	-	-	6 451	96.4	-	-	238	3.6	6 689
	87 574	55.1	61 279	38.6	7 514	4.7	2 492	1.6	158 859

a Includes Swastika, Chapleau and Gogama nurseries (OMNR)

bIncludes Orono and Midhurst nurseries (OMNR)

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Table 6. Summary of planting stock production for calendar year 1985 by region, type and source ('000 shippable seedlings).

	Contai	nerized	Bare	Bare-root		Accel. transplants		ings	ma ta 1	
Region	OMNR	Private	OMNR	Private	OMNR	Private	OMNR	Private	Total production	
Northwestern	1 913	8 768	4 000	_	350	_	_	-	15 031	
North Central	1 752	23 141	10 220	-	-	-	1	-	35 114	
Northern	145	37 351	19 507ª	-	7 142	-	50	655	64 850	
Northeastern	4 880	8 715	948	-	-	-	20	-	14 563	
Eastern	564	345	7 235	-	-	-	1 415	-	9 559	
Central	-	-	12 918 ^b	-	22	-	113	-	13 053	
Southwestern	-	-	6 451	-	-	-	238	_	6 689	
	9 254	78 320	61 279	_	7 514	_	1 837	655	158 859	

a Includes Swastika, Chapleau and Gogama nurseries (OMNR) bIncludes Orono and Midhurst nurseries (OMNR)

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Table 7. Summary of planting stock production, all sources, for calendar year 1985 by region, type and species ('000 shippable seedlings).

Region	Stock type	Species								
		White spruce	Black spruce	Jack pine	Red pine	White pine	Larch	Other conifers	Hard- woods	Total productio
			4 971	5 710	_		_	_	_	10 681
Northwestern	Containerized	-	2 024	1 658	- 6	_	_	_	_	4 000
	Bare-root	31 2 86		1 658	264	_	_	_	_	350
	Accel. transplants Cuttings	-	<u>-</u>	-	-	-	-	-	-	_
North Central	Containerized	_	13 658	11 235	-	-	-	-	-	24 893
	Bare-root	3 138	4 054	2 631	365	-		22	10	10 220
	Accel. transplants	-	-	_	-	-		-	-	-
	Cuttings	-	Ψ.	-	-	-	-	-	1	1
Northern	Containerized	-	19 072	18 398	-	-	16	10	-	37 496
	Bare-root	5 430	10 442	3 625	-	-	10	_	-	19 507
	Accel. transplants	-	7 142	-			-	-	-	7 142
	Cuttings	-	700	5		-	=	-	-	705
Northeastern	Containerized	276	1 635	10 337	685	562	20	-	80	13 595
	Bare-root	-	-	799	1 2 6	23	-	-	-	948
	Accel. transplants	-	-	-	-	-	-	-	-	-
	Cuttings	-	-	-	-	-	_	20	-	20
Eastern	Containerized	24	9	23	-	768	79	6	-	909
	Bare-root	1 527	-	532	728	3 311	43	822	272	7 235
	Accel. transplants	-	-	_		-	-	-	-	-
	Cuttings	-	-	82	-	-	-	-	1 415	1 415
Central	Containerized	-	-		-	-	-	_	-	-
	Bare-root	2 158	241	176	3 550	3 759	61	2 231	742	12 918
	Accel. transplants	22	-	-		-	-	-	-	22
	Cuttings	-	-	-	-	-	-	-	113	113
Southwestern	Containerized	-	-	_	-	-	-	-	-	- 451
	Bare-root	810	-	_	189	1 358		3 058	1 036	6 451
	Accel. transplants	-	-	-	_		-	-	-	
	Cuttings	-					-	-	238	238
		13 783	63 948	55 129	5 913	9 781	229	6 169	3 907	158 859