

## Summary of Meeting in Scandinavian I.P.P.S.: Recruitment of Horticultural Growers and Propagators in Scandinavia<sup>©</sup>

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The IPPS Scandinavia meeting in Malling, Denmark had as themes:

- 1) The problems surrounding the recruitment of young people to the horticultural profession.
- 2) Propagation media and new hormonal aids.

For the first part a number of professionals from several organisations throughout the Scandinavian countries were invited as speakers as well as some of the young people who recently have been through the educational programmes learning to be employed in horticultural enterprises. That part of the meeting was thus not solely focused on the propagating field per se and it has, therefore, been decided by the board that the papers should not be translated in full since they mainly are addressing local problems. A comprehensive summary of the papers of the first session follows, while the papers of the second session will be published separately.

Jesper Graves Pedersen from the vocational agricultural education committee in Denmark gave a clear overview of the educational programs for horticulture (Table 1) and added the statistics for the years as shown in the Tables 2 and 3. The question arises: how many trained persons are really needed in the industry, with the increasing mechanisation and thus elimination of tedious work processes. At least in many of the greenhouse firms there is a need for many workers with different skills: propagators, plant pathologists, welders, mechanics, electricians, computer technicians, transport logistics, sales persons, accountants, university graduates, and some even employ PhDs. Where does the vocationally educated grower person fit in? Both the speaker and the audience had several good answers to that question. He/she is the one who combines the needs of the plants and asks the right questions of the “experts”. They must know the characteristics of the plants and take the responsibility of the management decisions.

Marianne Vadgaard Christensen presented a survey of Danish nursery apprentices in post-training job situations. It showed that the number of young people who are admitted as apprentices is going down from about 80 per year in 1990 to 20 in 2001 and it is even worse for the greenhouse sector. It is also discouraging that only about half of students continue in the production nurseries after finishing the 3 to 4 year apprentice period including vocational school. Of course there are some ameliorating factors since some of those who have left the industry are working in landscaping, on maternity leave, or are taking further education. Thus in reality it is probably only 12% to 15% who leave the industry completely after finishing education; this is perhaps not alarming taking into account the “culture of restlessness” that is predominant these days. And maybe it has always been that way; in the old days there were a lot of the Copenhagen streetcar conductors who had been educated as nurserymen. Thus the problem now seems to be restricted to the recruitment of new students. Some of that is related to the very low birth rates 15 to 25 years ago and that it has been difficult to attract immigrants to the jobs in the green sector — not enough prestige and money in that.

**Table 1.** Production grower apprenticeship period, Danish system. Nursery production, vegetable production, fruit and berry production, greenhouse production (Total time: 3 years 8 months to 3 years 10 months).

Practical work experience	Basis			Main		
	School	Practical	School	Practical	School	Practical
Optional 8 months	20 weeks	6-12 months	10 weeks (13 weeks)	15 months	13 + 2* weeks, (10+2* weeks.)	Rest

The practical may be in different places

\*optional specialisation

- After this some students register for a 2-year theoretical program leading to a sort of bachelor degree, which unfortunately is not recognized as such by the universities.
- Regarding the university program please consult the website: <[www.horticulture.dk](http://www.horticulture.dk)>

**Table 2.** Admitted apprentices in different horticultural specialities with Danish schools and growers.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Greenhouse	270	240	180	182	173	141	147	124	81	63
Nursery	90	81	75	93	90	64	72	64	41	36
Vegetable	17	26	14	13	17	17	11	11	6	9
Fruit and berries	4	10	4	2	4	0	6	0	1	1
Landscaping	120	128	143	163	162	208	251	250	256	180
Total	501	485	416	453	446	430	487	449	385	289

**Table 3.** Graduates.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Greenhouse	248	270	240	90	244	223	186	121	113	128	101
Nursery	70	63	59	32	66	83	72	67	58	53	64
Vegetable	17	15	18	6	12	12	11	7	9	8	8
Fruit and berries	3	1	5	5	4	5	5	2	3	0	0
Landscaping	106	86	125	103	122	118	132	145	177	180	162
Total	444	435	447	236*	448	442	406	342	360	369	335

\*Program changes

Gert Jensen from the greenhouse company PKM gave an account of his own rather unusual career as a so-called adult apprentice where he at the age of 30 had grown wary as a supermarket employee and found new meaning in life as a grower and later propagator and breeder of campanulas. He scolded the owners and managers of nurseries for not giving enough attention to the apprentices by not giving them responsibility and the possibility to develop during the period of learning the trade. Also the schools were accused of being too lenient. Many of the students do not measure up to standards — too many are going through without learning enough, partly because of the system which reimburses the school for the number of students passing not for the quality of these students.

Gert was however, proud of his job and worked at being even better by reading and participating in adult education programs at the university.

Another recent graduate from the apprentice program — Rune Havgaard Sørensen — had come through at the usual age and speed. He had recently completed a trainee period in South Africa. He felt that far too little was done by the industry to visualize the good aspects of the education and the interesting work opportunities it leads to. The high school graduates contemplating a career in nurseries and greenhouses should be advised that this is a — literally — growth industry which utilises the knowledge they have acquired in biology, physics, computer science, technology, and trade. He found that there have been too many nostalgic feelings surrounding the “old grower” caring about his numerous different plants (referring to a popular Danish song). The nurseries and greenhouse firms must do more for their image as utilizers of modern technology and clean workplaces in the environmental sense. The public image of an industry using far too many pesticides and fertilizers is ingrained from kindergarten where teachers warn against the “poisonous” vegetables and plants. Let the kid in school come out and see the reality and let the bigger kids get afternoon jobs to test the way things really are.

Jan Nerelius, managing director of the Swedish Growers Association (GRO) was of the opinion that there certainly was a need for more apprentices in the green sector in Sweden where the educational structure is somewhat different from the Danish/Norwegian system. In Sweden most of the students going into nursery and greenhouse work attend the “green high schools” of which there are several in all regions of the country. Graduates from these high schools have very good backgrounds in biology, chemistry, and also more practically oriented areas such as trade and small business management. Jan Nerelius advocated a boosting of the status of green sector work: more responsibility to the trainees, more interesting work, and better pay. But also he foresaw a change in the values of the last century: from much hard work to utilisation and efficient intelligent handling of problems: from the former forced choice between family and career to a balance between the two and from wage according to time spent to salary after goals fulfilled.

In Sweden, a coordinated information package has been established for the green sector (farming, horticulture, and small holder forestry) apprenticeship after high school. The GRO Association also helps single companies and family businesses to increase their visibility in the local press and radio/TV. A well functioning cooperation has also been established between GRO and The Swedish Agricultural University.

The best way to predict and modify the future is to create it yourself.

Jan Mikal Hanasand, President of the Norwegian Horticultural Growers Association, lamented as the Danish representatives over low entry figures for students in the horticultural schools some of which has been forced to close due to low numbers of students. Furthermore, Norway has a specific problem in a very restrictive "homestead act" which proscribes that the further education of the 16 to 20 year olds must take place in the home county and there is not always a basis for a horticultural education. Norwegian growers would very much like a restructuring of the entire green-sector-basal education, but being low in numbers it is hard to penetrate the political establishment. He mentioned the fact that in Norway it is possible for eastern European workers to work for 3 months without a work permit; they act as wage pressure, which hardly is of any positive influence on the status of nursery and greenhouse work.

More optimistic was the president of the Swedish horticultural growers, Rune Henriksson, who mentioned that the growers had bought the green gymnasium (high school) "Hvilan" in southern Sweden in order to save it from a threat of closing it from the county. It now has 207 students many of these will go into practical work in the industry, while others will enter the university program – DSH (Danish Swedish Horticulture). We should learn from this and other GRO activities that if we focus on the industry as a green and exciting job market with responsibility placed on the individual worker even if that leads to some mistakes. We need to remember that: he who makes no mistakes probably doesn't do much good.

The president of the Danish horticultural producers association, Poul-Thage Pedersen, pointed to the association's century old interest in all forms of horticultural education and recruitment to the area. A report is under way examining the needs of the industry and the possibilities for enhancement of recruitment. He expressed appreciation of IPPS Scandinavia's interest in the problem and pleaded for a tighter integration of the education units in the schools and in the industry. Also he lamented the lack of knowledge of the true state of the industry among high school students and the public at large, a situation he hoped to find means to address in the near future. The motivation and background of the present students was a serious aspect that hampered the practical as well as the theoretical education. When there are very few students it is discouraging for them and for the teachers and mentors in the nurseries. We should probably all learn from the Swedish programs, but that is perhaps a larger task than can be achieved with support from horticultural growers alone.

Following lively discussion it was agreed that new goals must be set for vocational horticultural education in Denmark and Norway. It is extremely important that the students, the schools, and the growers know what these goals are before embarking on a vocational education contract.