

Electronic Journal of Polish Agricultural Universities is the very first Polish scientific journal published exclusively on the Internet, founded on January 1, 1998 by the following agricultural universities and higher schools of agriculture: University of Technology and Agriculture of Bydgoszcz, Agricultural University of Cracow, Agricultural University of Lublin, Agricultural University of Poznan, Higher School of Agriculture and Teacher Training Siedlce, Agricultural University of Szczecin, and Agricultural University of Wroclaw.



**ELECTRONIC  
JOURNAL  
OF POLISH  
AGRICULTURAL  
UNIVERSITIES**

**2006  
Volume 9  
Issue 2  
Topic  
ECONOMICS**

Copyright © Wydawnictwo Akademii Rolniczej we Wrocławiu, ISSN 1505-0297

BRALEWSKI T., HOŁUBOWICZ R. 2006. VEGETABLE SEED DISTRIBUTION ON THE POLISH MARKET - PART 1

*Electronic Journal of Polish Agricultural Universities*, Economics, Volume 9, Issue 2.

Available Online <http://www.ejpau.media.pl/volume9/issue2/art-35.html>

## **VEGETABLE SEED DISTRIBUTION ON THE POLISH MARKET - PART 1**

Tomasz W. Bralewski, Roman Hołubowicz

*Department of Horticultural Seed Science and Technology, August Cieszkowski Agricultural University of Poznan,  
Poland*

### **ABSTRACT**

The authors of this paper describe functions associated with vegetable seed distribution on the Polish market. They describe the role of distribution in the vegetable seed trade and the characteristics of different distribution channels. The results presented were based on information provided by seed companies and other participants of the vegetable seeds distribution system. The research was completed for the years 2001-2004.

**Key words:** seed distribution, seed company, seed market, seed marketing.

### **INTRODUCTION**

Each company which wants to exist and develop on the market must base its activity on a certain strategy. At present, this strategy is market oriented and thereby the importance of marketing activities has been increasing in Poland [19,20,21].

Distribution, along with such elements as product, price and promotion belongs to the classical marketing mix [11,12,22]. However, the marketing factors product, packaging, price, or promotion would not play their role on the market, if a proper distribution system did not exist. This system provides clients with a seed company trade offer.

### **MATERIAL AND METHODS**

Distribution of vegetable seeds and the problems connected with their distribution channels are presented in this paper. Data for this research was provided by seed companies operating on the Polish market and other units working with the seed trade. The data was received from the following Polish seed companies: CNOS-Vilmorin, PlantiCo Zielonki, PNOS Ożarów Maz., Polan, Spójnia, Torseed, and W. Legutko. The research was done in the years 2001-2004.

## THE ROLE OF DISTRIBUTION IN THE POLISH VEGETABLE SEED TRADE

The basic role of distribution is to provide seeds from a producer (a seed company) to a final user in a given period of time. In addition to this role of physical transfer and storage of seeds, the distribution channels in the seed sector play many other roles. The physical transfer of seeds in distribution channels involves two directions: the basic channel from a producer to a middleman and then to a final user and in the opposite direction from a middleman to a producer. The latter one comes from two main characteristics of the seed market: first, the seed trade has a seasonal character, seeds are sold mostly in the spring and after the season the middleman sends back to a producer the goods which have not been sold and secondly, seeds are sent back to a producer after their usefulness for sowing expires <footnote 1>. The returns from wholesalers were about 10-15 % of seed sent to them at the beginning of a given season, whereas in the case of large networks of markets returns reached as high as 30 %. Important storage problems arose during physical transfer of products in the distribution channels. They were influenced by specifics of seed storage and seed characters themselves. The whole amount of seed produced by a grower was delivered to a seed company in the autumn. The seeds were then processed, stored, and prepared for selling to satisfy the actual demand from the market. However, the process of selling seeds produced in one year usually lasts 2-3 years, i.e. seed marketing takes longer than seed production <footnote 2>. Storage of seeds for longer than one year always brings the risk of quality deterioration because of their biological nature <footnote 3>. The biggest storage losses come from a gradual decrease in their germination percentage, decrease in their weight due to seed respiration, <footnote 4> and damage done by insects. Due to lowering of the seeds germination capacity, Polish seed companies lost 2-5 % of the seeds in the years 2001-2004 <footnote 5>. In order to diminish this loss, seed companies did their best to sell seeds within the first trade season. During the years 2001-2004, this was achieved 60-90 % of the time (the average value: 70%). Problems and risks associated with seed storage in the distribution channels was the greatest concern of the seed companies.

Information in the distribution channels went both directions: from a producer to a purchaser and the opposite way. The seed companies through some elements of the distribution channels informed clients about their trade offer (presenting an assortment, characteristics of its elements, and prices of products) and carried out promotion activities. In the opposite way, the companies received opinions concerning their offers and the effectiveness of their distribution effort. When middlemen co-operated with several companies, their distribution channel contacts provided information about competitors' activities. This was especially well observed when promotion campaigns by wholesalers involved providing their clients with advertising materials.

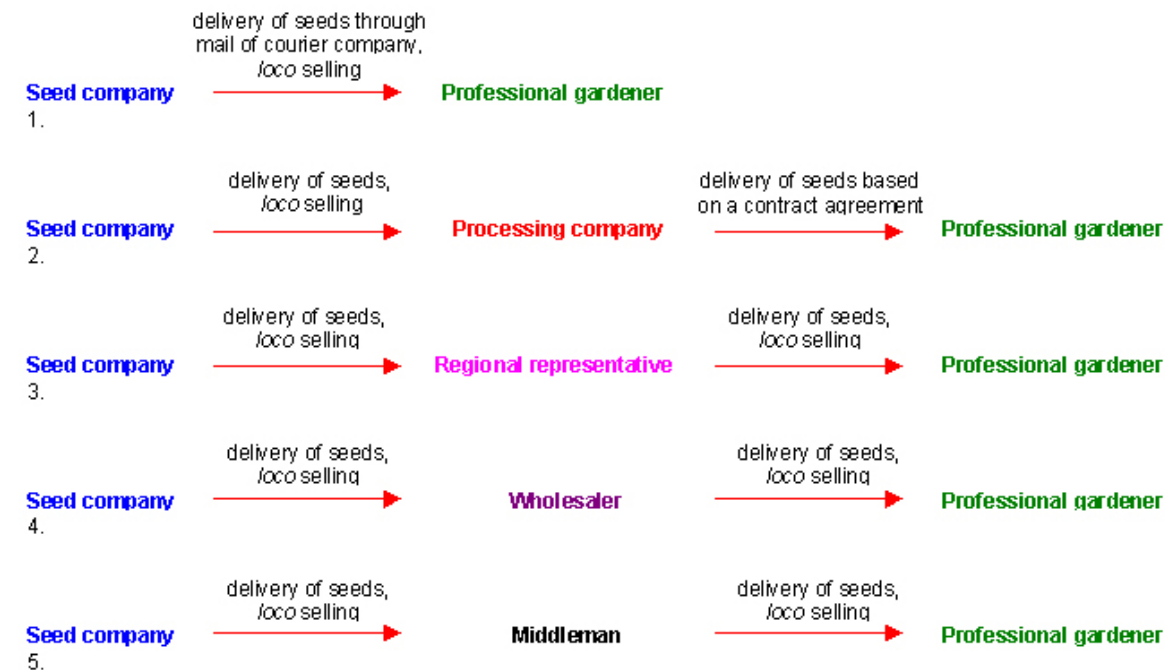
The main financial function of the distribution channels was to transfer capital in the opposite direction as the products. This function was sometimes disturbed by a dishonest middleman or wholesaler. The most common disloyalties included delays in payments and cheating companies out of seeds. However, these disorders of capital flow were often expected by the seed companies which wanted to support their wholesalers and middlemen. The decision about such support was based on several factors, including the individual wholesaler's selling turn over, payment record, and length of co-operation. As a result of such policy, the payments for seeds were often postponed.

The distribution channels also affected the ability of seed companies to adjust offers in response to clients' expectations. Their main purpose was to meet expectations of the distributors <footnote 6>.

## KINDS OF VEGETABLE SEED DISTRIBUTION CHANNELS

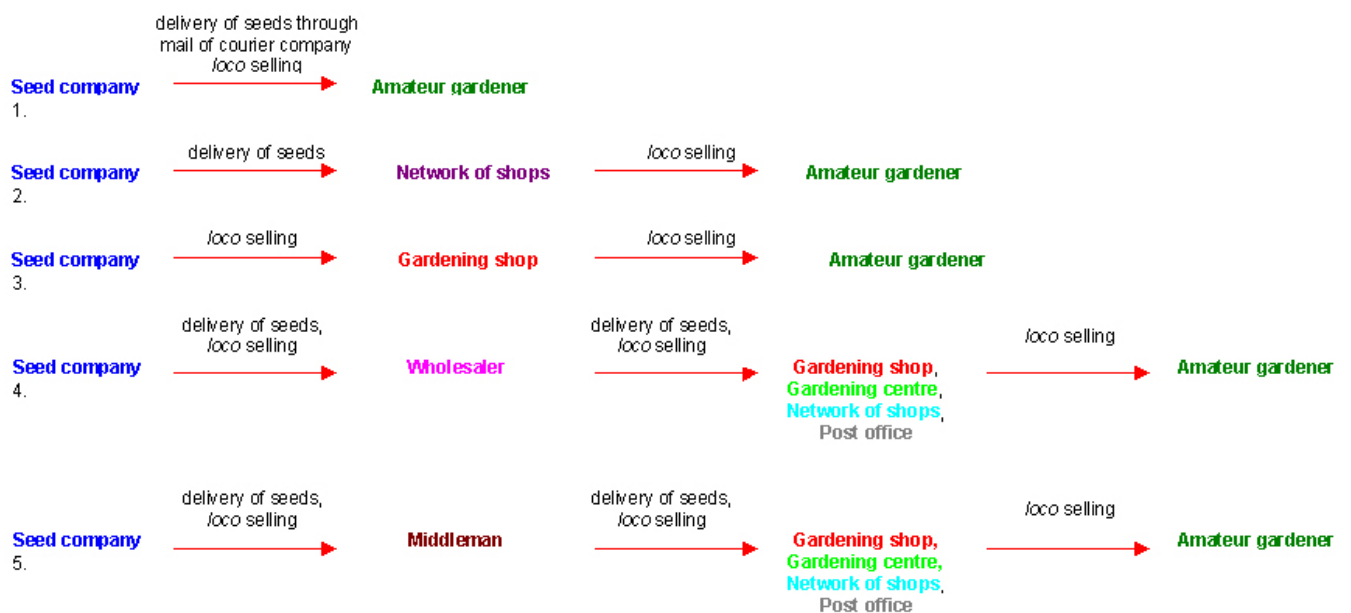
Several factors affected the number of levels and participants involved in distribution channels. They included: number of clients, amount of product bought by a typical client, and geographical concentration of the market. The mean value of the seed purchase, was positively correlated with the number of clients. A large, spread out geographic market was characterized by a high number of distribution levels and many clients per individual level. Another important factor was the seed package size. The bigger the seed package size, the smaller was the number of units involved in their distribution, and the shorter was the distribution channel. The structure of the distribution channels was also affected by the characteristics of the seeds themselves. The less permanent the seed characteristics, the lower was the number of distribution channels <footnote 7>. The seed distribution channels for the amateur gardener seed market were much more built up (both vertically and horizontally) than the ones for the professional gardeners ([Fig. 1](#) and [2](#)).

**Fig. 1. The basic kinds of distribution channels of vegetable seeds on the Polish market, in which the final purchaser is a professional gardener**



Source: own research

**Fig. 2. The basic kinds of distribution channels of vegetable seeds on the Polish market, in which the final purchaser is an amateur gardener**



Source: own research

The most important basic distribution channels of vegetable seeds for professional gardeners in Poland (fig. 1) were the ones in which the gardeners either bought seeds directly from seed companies (fig. 1-1) or through regional representatives (fig. 1-3). The latter was especially popular amongst the national companies representing foreign companies operating on the Polish market. Important, in terms of a single order, was the selling of seed to vegetable processing units. In their concern to get large amounts of uniform raw material for processing, they required their co-operating vegetable growers to cultivate the same selected cultivar. In this distribution channel, the foreign cultivars dominated. This, according to the domestic Polish companies comes from the fact that foreign investors own most of such vegetable processing plants. They in turn have free choice to select the seeds and company most suitable for them. The least important seed distribution channel for professional gardeners was selling through middlemen, i.e. through companies focusing only on selling improved quality seeds (fig. 1-5).

The most important basic distribution channel for vegetable seeds for amateur gardeners in Poland (fig. 2) was the one in which the wholesaler sells seeds to a retail selling unit. (fig. 2-2). Amongst the retail selling units, there has been a growing importance of big networks of markets. This was due to direct co-operation of the seed companies with them <footnote 8>. These networks, due to the size of selling in a short time, were also valuable partners for wholesalers <footnote 9> and middlemen. The latter included contracts in which whole seed lots were first bought from the seed companies, improved, repacked, and then sent to big supermarkets. The middleman offers were directed to big supermarkets <footnote 10>. Other seed selling retail distribution points on the Polish market worth mentioning here, common in the whole world, were post offices.

The extent of building up of distribution channels was evidenced by the large number of wholesalers with whom the Polish seed companies were co-operating. In the years 2001-2003, each Polish seed company was co-operating with an average of 75 wholesalers (this number ranged from 50 to 100). Besides that, the Polish seed companies were also selling seeds directly through their own selling points (garden shops, garden centres, and seed selling units on the vegetable wholesale markets). The turn over from these selling points was low and ranged from only one to several percent of the total seed sales revenue earned by a company. The majority of these companies sold only 5-6% of their total turnover from these sales locations. Most of the companies responding to this research effort did not build up their own distribution channels <footnote 11>, because it decreased their ability to focus on their basic activities - plant breeding and seed reproduction.

## DISCUSSION

A large variety of seed distribution channels were found on the Polish market. This was accompanied by a different distribution policy for the seeds delivered to the individual segments of the market. The seed companies surveyed indicated that the organisation of the seed distribution channel played an important role in the marketing strategies of their companies. Distribution as an element of the marketing strategy was mentioned by numerous authors [1, 3, 13, 14, 15, 16, 17, 23, 28]. As mentioned by Badzisz [2] properly carried out distribution has an influence on the market success of the company and can be a source of competitive advantage [3, 5, 8, 14, 19, 25, 26, ]. This phenomenon was found when creating new and building up already existing distribution channels for seeds. Thus, market and competition forced the companies to change their organisation of selling and distribution of seeds [13].

Factors mentioned earlier by Czubala [3], Downey [6] and Sławińska [25] such as product, price, consumer behaviour, and geographical distribution of customers affected the selection of the distribution channels by the producers.

One of the developing elements of the Polish market is the big retail seller (mostly big markets). Their role, as mentioned by Ostrowski [18] and Czubala [5], has been increasing rapidly. The development of these large trade area retail sellers was actually contributing to a decrease in the significance of seed wholesalers. As mentioned by Kałżna-Drewnińska [10], direct co-operation between producers and large networks of supermarkets is a chance for increasing seed turn over and income.

The involvement of the Polish post office in seed distribution channels was also found. The phenomenon of increasing importance of mail product selling was also mentioned by Ostrowski [18] and Rojek [24].

When characterising the distribution channels of seeds on the Polish market, attention must be paid to the role of the regional seed company representative and their seed selling to professional gardeners. This concern mostly was registered by Polish companies representing foreign seed companies. In this distribution channel, there is no anonymity between a seller and a purchaser. This characteristic, according to Wojciechowski [29], has been underestimated in the specifics of the means of production. Moreover, Mruk [15] reported the increasing role of direct selling. Czubala [4] claimed that distribution of goods through regional company representatives was very good especially for seasonally demanded products. They include the means of production [9]. As mentioned by Budzisz [2] and Penc [21], close contact of a company with their clients has a large affect on its market success. Sliwińska [27] also drew out attention to an important role of a seller in the case of a short distribution channel. As mentioned further, a short distribution channel is essential when selling a small amount of precious seeds to professional gardeners. The fact that higher valued goods lead to a short distribution channel was also described by Haba [8]. According to Czubala [3], an advantage of the short distribution channel is maintaining full control of it.

## CONCLUSIONS

1. In the years 2001-2004 companies were selling 60-90 % (mean 70%) of the seeds coming from the previous year's harvest. Returns of seeds ranged from 10 to 15% in the case of wholesalers and up to 30% in the case of supermarkets. The mean time of storing of seeds in storehouses was 2-3 years. The losses of seeds due to loss of their germination capacity reached 2-5 % annually.
2. The structure of the distribution systems on the Polish market depended on many factors which were closely related to individual segments of the market: amateur and professional. Distribution channels were more built up (extensive) in the case of the amateur market.
3. Seeds for professional gardeners were sold directly from the company or through their regional representatives. The latter consisted mostly of foreign company representatives. Selling seeds through processing plants was also important. In this distribution channel, imported seeds were dominant.
4. The seeds on the Polish market reached the retail selling units through wholesalers. In that area, the networks of big retail shops were dominant. The seeds sold by the networks were obtained mostly from seed selling companies or through middlemen.
5. The system of seed distribution on the Polish market is very built up both vertically and horizontally and therefore, difficult to manage. During the years 2001-2005, each company had trade contacts with an average of 75 wholesale houses.

## FOOTNOTES

1. The validity of vegetable seed quality certificates expires after 12 months and for hermetically packed seeds with germination capacity 10 % above the minimal value after 24 months [7].
2. In the case of maintaining the sowing value of seeds for a long time, this period can be longer. The seed quality was also important because the companies first of all wanted to get rid of the lower quality seeds, because continued storing would be highly risky.
3. Especially high risk is connected with species with low viability. The biggest problems in seed companies were associated with the seeds of onion, lettuce, chive and other such species.
4. They reach, depending on the individual species, 3-6 %.
5. In the individual companies, the value of these losses ranged from a few thousand to over one million PLN.
6. For example, the wholesalers required that each seed collector pack had one single bag glued to its front. This helped them to store and handle it in the storing house. Also, the middlemen orientated for a certain group of purchasers set special requirements for seed companies to prepare seeds by assortment, price, and package.
7. This refers to conditioned ones which are more susceptible to storing conditions than the untreated seeds. They had to reach a gardener in a short time just before sowing them. Such seeds were offered to a professional gardener solely by a seed company or through its regional representative.
8. Most of the seed companies prepared special assortment-price offers for networks of shops, but they carried out seed selling by co-operating with wholesaling companies in order to avoid competition with them on the same level.
9. In the past, there were cases when wholesalers prepared trade offers for networks of shops before seed companies actually did it themselves.
10. An example could be selling seeds using a brand of the trade network of shops or delivering seeds already placed on a disposable stand.
11. Except when one of the activities was selling other horticultural products. In this case, the company's own seeds were sold in a way that their participation in the final turn over of the company was small.

## REFERENCES

1. Brojerski M., 2000. Przedsiębiorstwo a strategia rynkowa [A company and marketing strategy]. Zesz. Nauk. Wyższej Szkoły Zarządzania i Bankowości w Poznaniu 1(9): 9-19 [in Polish].
2. Budzisz B., 2001. Zachowania przedsiębiorstw względem konkurencji [Responses of companies to competition]. Zesz. Nauk. Wyższej Szkoły Działalności Gospodarczej w Warszawie 7: 45-54 [in Polish].
3. Czubała A., 1996. Dystrybucja produktów [Goods' distribution]. Polskie Wyd. Ekonomiczne, Warszawa [in Polish].
4. Czubała A., 1997. Znaczenie i kierunki przeobrażeń pośrednictwa hurtowego w kanałach dystrybucji [Importance and directions of changes in wholesale brokerage in the distribution channels]. Prace Nauk. Wyższej Szkoły Przedsiębiorczości i Marketingu w Chrzanowie 1: 71-82 [in Polish].
5. Czubała A., 2002. Rola dystrybucji w strategiach konkurencji [The role of distribution in competition strategies]. Prace Naukowe Wyższej Szkoły Przedsiębiorczości i Marketingu w Chrzanowie 6: 131-138 [in Polish].
6. Downey D., 1997. Managing a successful seed business: a focus on marketing management. Polish Seed Industry Executive Management Program, Purdue University Research Foundation, West Lafayette, USA.
7. Dz.U. Nr 108, poz. 1184. Rozporządzenie Ministra Rolnictwa i Rozwoju Wsi z dnia 14 sierpnia 2001 r. w sprawie rejestracji odmian i udzielania ochrony wyłącznego praw do odmiany oraz wytwarzania i kontroli materiału siewnego [Directive of Min. Agric. Rur. Dev. (MARD) concerning cultivar registration and issuing an exclusive plant breeder's right and production and control of sowing material] [in Polish].
8. Haba D., 2002. Kanały w procesie dystrybucji [Channels in the process of distribution]. Zesz. Studencki Wyższej Szkoły Ekonomii i Administracji w Kielcach 1: 75-84 [in Polish].
9. Janczewska B., 1998. Specyfika marketingu środków produkcji [Specifics of marketing of production means]. Zesz. Nauk. Wyższej Szkoły Ekonomicznej w Nisku: 2(2): 120-129 [in Polish].

10. Kałszna-Drewnińska U., 2001. Aktywizacja sprzedaży detalicznej [Activation of retail selling]. Prace Nauk. Akademii Ekonomicznej we Wrocławiu 869: 109-117 [in Polish].
11. Kotler Ph., 1994. Marketing. Analiza, planowanie, kontrola [Marketing. Analysis, planning, control]. Wyd. Gebethner i Ska, Warszawa [in Polish].
12. Kotler Ph., Armstrong G., Saunders J., Wong V., 2002. Marketing. Podręcznik europejski [Marketing. A European manual]. Polskie Wyd. Ekonomiczne, Warszawa [in Polish].
13. Kowalczewski W., 2001. Zarządzanie przedsiębiorstwem w zmieniającym się otoczeniu [Managing a company in a changing surrounding]. Zesz. Nauk. Wyższej Szkoły Działalności Gospodarczej w Warszawie 7: 7-15 [in Polish].
14. Marciński T., 2003. Dystrybucja w świetle rozwoju i integracji zarządzania marketingowego i logistycznego [Distribution in the light of development and integration of marketing and logistics management]. Zesz. Nauk. "Studia Ekonomiczne" Akademii Ekonomicznej w Katowicach 27: 271-282 [in Polish].
15. Mruk H., 2003. Rola marketingu w zarządzaniu przedsiębiorstwem [The role of marketing in company management]. Forum Nauk. Instytutu Marketingu Wyższej Szkoły Zarządzania i Bankowości w Poznaniu 1(16): 11-23 [in Polish].
16. Mruk H., Mruk J., 2003. Strategia źródłem przewagi przedsiębiorstwa [Strategy as a source of a company advantage]. Forum Nauk. Instytutu Marketingu Wyższej Szkoły Zarządzania i Bankowości w Poznaniu 1(16): 33-46 [in Polish].
17. Mruk H., Rutkowski I., 1994. Strategia produktu [A product strategy]. PWE, Warszawa, pp. 13, 82-94 [in Polish].
18. Ostrowski D., 1998. Systemy przepływu i dostarczanie produktów do nabywców [System of flow and delivery of products to purchasers]. Zesz. Nauk. Wyższej Szkoły Ekonomicznej w Warszawie 2(12): 113-134 [in Polish].
19. Penc J., 2000. Logika zdrowej konkurencji [Logic of healthy competition]. Studia i mat. Wyższej Szkoły Marketingu i Biznesu w Łodzi 6: 139-156 [in Polish].
20. Penc J., 2000. Zarządzanie a konkurencyjność [Management and competitiveness]. Zesz. Nauk. Wyższej Szkoły Zarządzania i Marketingu w Warszawie 1(7): 5-20 [in Polish].
21. Penc J., 2001. Warunki rozwoju nowoczesnej firmy [Conditions of development of a modern company]. Studia i mat. Wyższej Szkoły Marketingu i Biznesu w Łodzi 8: 45-70 [in Polish].
22. Przybyłowski K., Hartley S.W., Kerin R.A., Rudelius W., 1998. Marketing [Marketing]. Dom Wydawniczy ABC, Kraków [in Polish].
23. Reformat B., 2003. Ogólna strategia marketingowa przedsiębiorstwa a jego strategia dystrybucji [A general marketing strategy of a company and its distribution strategies]. Zesz. Nauk. "Studia Ekonomiczne" Akademii Ekonomicznej w Katowicach 27: 233-253 [in Polish].
24. Rojek T., 2003. Ewolucja i perspektywy rozwoju polskiego handlu [Evolutions and perspectives of development of Polish trade]. Zesz. Nauk. Akademii Ekonomicznej w Krakowie 618: 183-196 [in Polish].
25. Sławińska M., 2001. Zarządzanie dystrybucją w warunkach rynku konkurencyjnego [A distribution management in the conditions of a competitive market]. Zesz. Nauk. Wyższej szkoły Handlu i Usług w Poznaniu 2: 9-17 [in Polish].
26. Strzelczyk J., 2001. Rola marketingu w tworzeniu przewagi konkurencyjnej przedsiębiorstw [The role of marketing in creating a competition advantage of companies]. Zesz. Nauk. Wyższej Szkoły Działalności Gospodarczej w Warszawie 7: 184-191 [in Polish].
27. Sławińska K., 2003. Wzrastająca rola sprzedawców w działalności marketingowej przedsiębiorstw [A increasing role of sellers in the marketing activities of companies]. Zesz. Nauk. Śląskiej Wyższej Szkoły Zarządzania w Katowicach 4: 47-57 [in Polish].
28. Waniowski P., 1998. Uwarunkowania cechowych strategii przedsiębiorstw (wybrane problemy) [Conditions of feature strategies of companies (selected problems)]. Roczn. Nauk. Wyższej Szkoły Zarządzania i Marketingu we Wrocławiu 1: 87-100 [in Polish].
29. Wojciechowski T., 1998. Rynek środków produkcji – niedoceniana specyfika [A market of production means – underestimated specifics]. Zesz. Nauk. Wyższej Szkoły Zarządzania i Marketingu w Warszawie 3: 20-26 [in Polish].

Accepted for print: 26.06.2006

---

Tomasz W. Bralewski  
Department of Horticultural Seed Science and Technology,  
August Cieszkowski Agricultural University of Poznan, Poland  
Baranowo, 62-081 Przemierowo, Poland  
email: [twbseed@interia.pl](mailto:twbseed@interia.pl)

Roman Hołubowicz  
Department of Horticultural Seed Science and Technology,  
August Cieszkowski Agricultural University of Poznan, Poland  
Baranowo, 62-081 Przemierowo, Poland

---

[Responses](#) to this article, comments are invited and should be submitted within three months of the publication of the article. If accepted for publication, they will be published in the chapter headed 'Discussions' and hyperlinked to the article.

---

[Main](#) - [Issues](#) - [How to Submit](#) - [From the Publisher](#) - [Search](#) - [Subscription](#)