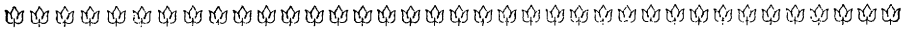


THE MARKETING OF SEEDS



How We Get Seeds of Vegetables and Flowers

WILLIAM B. CARTER AND EDWIN P. BUGBEE, JR.

VEGETABLE and flower seeds are produced by a few companies, mostly in special areas, but they follow many paths from the producer to the planter.

Most of our vegetable seeds are grown in the Western States by firms that produce a full line or by specialists who concentrate on a few species.

Some seed companies own land on which they produce a part of their needs. Such farms offer the advantage of complete control, but they do not provide the economic safety of a more diversified farming operation.

The usual practice is therefore to contract production with independent farmers. Most seed contracts are of the

bailor-bailce type, wherein the seedsman is the legal owner of the crop, and all of it is delivered to him.

Contract growing permits the selection of particular areas and even farms that are best adapted to the species. It also facilitates contraction and expansion of acreage as demand fluctuates. It is popular with farmers because it provides a sure market at a definite price, and payment is often made early enough in the fall to help defray harvesting costs for other crops. Furthermore, many seed crops, especially legumes, fit nicely in rotations.

Contract crops are supervised by the seedsman's fieldmen. They advise the farmer on fertilization, irrigation, control of pests, harvesting, and other cultural matters, in order to bring in the best yield of high-quality seeds.

In their peak season, fieldmen may be up at 3 a.m. to direct dusting for insect control. Then they are out checking fields until sundown, about 9 p.m.

They also have the responsibility of

writing the acreage contracts and maintaining good relations between the farmers and the company.

The fall months are the busy ones for the producers. Cleaning operations begin when the farmers bring in the harvested crops. Activity in the processing plant soon works up to a fever pitch and continues, perhaps with two or more shifts a day, until all the crops are cleaned.

Many tools and techniques are available for removing dirt, weed seeds, and any other impurities. They include airblasts, gravity separators, flat and cylindrical screens, indented disks, velvet rollers, the fractionating spiral slides, magnetic separators, washers, handpicking belts, and electronic machines that sort seed by color.

Seeds of most species are harvested between September and December and are needed in trade channels almost immediately. Fall planters in the Deep South and wholesalers who must package for distribution to dealers require seeds as early as they can be made ready.

Because of this seasonal pressure, seedsmen must have enough plant and equipment to process almost their entire year's product in just a few months—one reason for the relatively low ratio of sales to capital investment that characterizes the seed business.

The commercial grower may receive his supplies of seeds through one of several channels. Some full-line producers solicit business directly from growers and own retail stores in places of concentrated vegetable growing. The stores carry inventory and are a base for sales operations.

The harvested seeds are assembled at central points for packaging and re-shipping in combination loads to the retail stores or branch warehouses. This system keeps the seedsman in close touch with the consumer, but it requires heavy investment and commitment to overhead expense.

Other full-line seedgrowers also do central packaging and sell mainly under their own brand, but only

through franchised distributors and dealers. They thus take advantage of the greater potential saturation of the market that can be made by firms with a broad range of agricultural products to sell.

The seedsman's salesmen are technical advisers. They make periodic trips with the distributor's men and bring them and their customers up to date on developments. Available capital thus can be spread farther and the rate of turnover can be increased.

A third system is used by certain full-line and specialty seedgrowers who sell bulk, unbranded seeds to wholesale and retail firms that package and sell regionally under their own brand. Here, the seedsman's identity does not become known to the consumer, and his reputation resides within the trade. A great deal of the seed has moved through such outlets in the past 50 years, but the modern trend favors the nationally advertised brand. Its advantages include consistency and uniformity of quality and the use of new merchandising techniques. The middle of the 20th century may be the transition period between the dominance of private, regional brands and the general use of the seedgrower's nationally known brand.

Dealers and distributors normally place advance bookings at definite prices with their suppliers. The orders are subject to pro rata delivery in case of short crops but otherwise are firm. Commercial growers (except very large ones) usually buy their seeds just before planting time.

The growers base their estimates of the year's sales partly on orders they receive before planting time, but they must guess what their subsequent sales will be. For beets, carrots, turnips, and other biennials, the guesses must be made 2 years in advance.

The use of seeds fluctuates with weather, the demands for vegetables, and other things. Therefore, and because of the uncertainty as to yields of the seed crops, the amounts harvested by seedgrowers often fail to match

their needs. Surpluses and shortages are common in the business.

The situation becomes acute among companies that sell seeds to canners and freezers. Food processors use a lot of seeds and must have particular varieties. Their growing and selling operations are highly competitive. If a canner needs Tendergreen beans to satisfy his growers and his customers and that variety is scarce, he cannot substitute Landreth Stringless, as a home gardener could.

Processors usually place preplanting orders to protect their supplies of certain varieties. But because markets for canned and frozen foods may become glutted, a reduction of the planned production may become necessary. Then the seedsman usually offers to help by agreeing to defer delivery of the contracted seeds for a year.

Another—and better—approach than acreage reduction is special industry-wide promotion by the food processors to move the surplus off the shelves.

Canners buy their seeds mostly from seedgrowers or large distributors that specialize in vegetable seeds. Delivery normally is made in the spring, shortly before planting time for the crop. The canners charge their growers approximately at cost for the seed as they issue it.

Careful credit management is important for seedsmen serving commercial growers and the processors. The hazards of farming and fluctuations of markets sometimes act to drain off reserves of ready cash in the hands of users of seeds. Credit losses in the business probably are similar to those in other agricultural supply lines, but well above the average of all industries.

Commercial growers, food processors, and their suppliers of seeds have close relationships. They frequently meet with plant scientists of the Department of Agriculture and State agricultural experiment stations to discuss problems of the food industry.

FLOWER SEEDS bought by commercial users are distributed and handled

in much the same way as vegetable seeds. Some firms specialize in serving the needs of growers of bedding plants and cut flowers and florists. Other firms maintain separate distributing divisions, whose staffs know the technical requirements of these customers.

Because the income of the commercial user depends to a great extent on the quality of the seeds he plants, the seedsman and the commercial user of flower seeds work together in developing new varieties and improving supplies of seeds to meet the needs of these markets.

Seeds of such flowers as stocks, snapdragons, and sweetpeas are popular with greenhouse growers of cut flowers. Petunias, marigolds, sweet alyssum, and zinnias are important to growers of bedding plants for sales to home gardeners for transplanting.

When a commercial user gets a supply of seeds that perform well, he wants the exact item again—until he finds something better. Strict control is needed in all stages of production to assure that seeds for his next purchase will be identical. The place they are grown, the parent stock, and the method of harvesting and cleaning are factors of moment.

The commercial user of flower seeds usually places contract orders for large quantities with distributors to make sure that a crop will be grown for him. Even so, a poor crop may cut down the amount available and force him to look for a substitute.

So also the grower of bedding plants or cut flowers, who insists on seeds from lots that have done well in the past. He may look to one distributor for some flower classes and to other seedsmen for his other requirements. He is reluctant to change his supply of seeds unless he is assured the seed will give similar performance. A slight change in the number of days until maturity, color, or height, can affect his income.

As new strains and varieties are developed, the seedsman wants them tested and tried by the commercial

user. If the tests prove that the new item is better, the distributing seedsmen can look for an order. The entire purchaser-supplier relationship is built on cooperation and confidence.

Many pounds of flower seeds are purchased each year by parks, institutions, and estates. These markets are handled much the same as are the commercial growers' market. Several distributing firms prepare catalogs and literature for this trade. Either by salesmen or through direct-mail contact, the seedsmen keeps his customers informed of technical advances, techniques, and recommendations. Purchases are usually made on a spot-order basis, but large quantities may be quoted and sold on a bid basis.

Drug companies are large users of certain seeds in their manufacturing or experimental operations. Their requirements are so specialized that each purchase is the product of direct negotiations between the drug company and an experienced grower located in the most advantageous area of production.

The home-garden market for flower and vegetable seeds has been expanding because of the move to the suburbs, the trend to outdoor living, and the increase in population. Distribution of seeds to home gardeners takes many forms.

Distributor seedsmen have their own growing facilities or arrange for their supplies with specialists, with whom they place contracts early in the year before crops are planted so that the seedsmen can plan his acreage to meet the demand. Early contracts help to keep supplies level.

Because the reputation of a brand depends on the customer's satisfaction, the quality of seeds is a prime concern. Many steps are taken to assure quality.

One form of quality control is in trial grounds. On regular garden plots the seedsmen can rate the performance of his seed at all stages of development. The trials indicate which lots are not performing satisfactorily and which

lines need improvement. Details like uniformity of the plants, blooming dates, number of flowers, and the size of vegetable are watched.

Here also other items and improved varieties are tested for possible addition to the line. Visits to other trial gardens, operated by All America Selections, other seedsmen, and universities are helpful in keeping abreast of developments.

FALL is a busy time for the distributor. Seeds arrive in bag lots from the growing field and the cleaning plant. They now must be tested, packed, and distributed in a few months. In fact, some shipments, such as those to the South, must be made without delay. Every available person is needed at this peak time, and night shifts are not unusual.

Inspections and tests are made immediately to make sure that every bag of every harvest lot meets the standards of quality. To speed up the process, some tests are started with advance samples rushed from the fields. Seed not properly cleaned is returned for re-cleaning and processing. Samples are taken from each bag for testing by the seed laboratory. The laboratory is a department in the seedsmen's establishment or an organization that does this work for him. Packaging begins if the seeds pass the tests.

Seeds are packaged for the home-garden market in several forms. The old way is to ship bulk seeds in large bags directly to the dealer. The dealer in turn measures out the desired amount to each customer—1 ounce of beet, 1 pound of beans, and so on.

An improved method of distributing quantities larger than a packet to the consumer is the packaged bulk seed unit. Individual paper or cloth bags, and cartons of an ounce, one-fourth pound, or 1 pound may be offered. The unit packages eliminate much handwork and identify the brand name.

Hermetically sealed cans are another development. Cans have several ad-

vantages over bags and cartons. Cans protect seeds from moisture, rodents, insects, and crushing. If properly done, canning increases the length of time germination can be maintained before it drops below standard.

Large bags and packaged bulk units are filled by weight. The packaging equipment is semiautomatic in most packaging plants. Most distributors find that it is not economical to mechanize highly for this short period.

The retail seed packets are also filled on semiautomatic machines. Here again, the cost of high-speed automatic machinery in relation to the time it will be used is a determining factor. Because some varieties sell in relatively small amounts, it is impractical to set up an elaborate machine for a short run. The variations of size and shape of seeds also make full automation quite difficult.

The number of seeds per packet is determined by the number needed to plant a row. Packets of flower seeds are filled with a generous supply for the average home planting. Filling of packets is by volume. The number of seeds or the weight of the seeds going into the packet is converted into volume for filling by the machine. Packets are checked often for amount by weighing several packets against a check weight of packets that are known to have been filled exactly.

Retail packets carry a description of the item, planting instructions, and other information to help insure best results.

One type, the picture packets, are distributed for display in dealer stores, but mail-order packets—the other type—usually are printed merely with copy, since the customer has made his purchase on the basis of the picture and description in a catalog. Picture packets are produced by a few printers who maintain large libraries of available color pictures for use by all seedsmen of standard items. They also have special color plates for the exclusive use of individual seedsmen.

Seedsmen selling both types of pack-

ets use the same quality and amount of seeds in both.

Some packets show zone maps that indicate the time for planting. Others picture the small plants to help the home gardener in weeding out other plants that sprout at the same time.

Pictures on the packets now may be reproductions of color photographs. They may show the use of the flower and vegetable—corn on the cob ready to eat, flowers in a bouquet, and such. Cellophane jackets are used on some packets to protect the seeds and make the packet look even better.

Some seeds are packaged in forms to make gardening easier. There are several preseeded products, such as seed tapes and garden mats, in which the carrier can be planted along with the seed. Chemicals, fertilizers, and other materials sometimes are included with these carriers.

Preseeded flats for indoor starting of seeds have been put on the market as a convenience to gardeners.

BULK SEEDS and packaged bulk seed units are usually sold to dealers on contract. Contract forms are sent out or delivered by the seedsman from May through July for ordering seeds to be shipped early the following year.

The contracts enable the seedsman to plan his production to best serve the needs of his customers and guarantees to the dealer the lowest price for the year. If the price of the seeds goes down before delivery, he receives the lower price. If the price of the seeds goes up, he is protected against the increase. Fill-in orders are ordered for spot delivery, with prices quoted as of the day he orders.

The color-picture packets usually are sold on a sale-or-return basis. The dealer's contract states that title to the packets passes to the dealer at the time of shipment, but at the end of the season he may return all unsold packets to the distributor for credit. The dealer therefore will receive a completely new assortment the following season.

Color packets and bulk seed are sold

under a warranty clause, like: "Seller warrants to the extent of the purchase price that seeds sold are as described on the container, within recognized tolerances. Seller gives no other or further warranty, expressed or implied."

Shipping dates vary throughout the country. Seeds are needed in the South long before the snow is off the ground in the North. Most shipments are made about 2 months in advance of the retail buying season. The dealer thus can put up his display and make last-minute inventories. When the buying season arrives, he has little time for anything except serving the needs of his customers.

The assortment of packets in the dealer's display depends on several factors. The number of packets depends on his potential sales. A small dealer may receive 500 packets made up of 50 to 75 varieties in his initial shipment. A large dealer could receive as many as 2 thousand packets composed of 150 to 300 different varieties.

Certain items are more popular in some areas than others. The composition of the assortment depends on geography, nationality groups, climatic conditions, and preferences in the section.

With his assortment of seed packets, the dealer receives a display rack free, with the expectation it will be used several years. The display racks have become much more than utility holders of packets. In line with modern merchandising techniques, they are frequently substantial and attractive fixtures that are a focal point for the garden supply section of the store. Banners, posters, and leaflets also are supplied free by the distributor.

Methods of selling and servicing the dealers vary with areas and the distributor. Some firms have salesmen who solicit orders before the season and deliver the rack and packets at the proper time for display. Throughout the selling season, visits are made to make sure the display rack is kept well supplied at all times. Other seedsmen use wholesalers and jobbers or arrange

with rack jobbers to service the dealers and maintain adequate packets on display. Still other seedsmen send seeds and displays to the dealer by mail and service his reorders by mail.

Purchasing seeds from the mail-order catalog is a tradition with countless gardeners. The catalog arrives soon after January 1, but work on it started months before: Pictures were taken in previous summers; decisions were made as to the best varieties to be offered; copy describing each item was written.

Some catalogs are mailed regionally. Others are distributed nationally to several million persons. Since mail-order catalogs draw orders from large areas, they can offer many special seed varieties not profitably handled by the local dealer.

A catalog may list as many as 2 thousand different varieties and give the home gardener a choice of packages of different sizes.

Even seed of unusual or exotic types can be profitably listed. Demand in any one area is small, but overall sales can make it worth while for the mail-order seedsman. In fact, several mail-order catalogs specialize in seeds of unusual plants.

WHATEVER the seedsmen's problems and considerations in preparing the catalogs, the gardener's problem—if that's what it is—is quite different. His is the pleasurable task of selection from the treasures offered him, the exquisite agony of deciding between Moonglow and Silver Star and between Buttersweet and Bountiful. Maybe he ends by ordering them all, but no matter—the price is low; the return is high. For the gardener, few of life's joys surpass the pleasures of perusing seed catalogs the long winter evenings when spring seems far behind.

Seeds of unusual types sometimes carry a problem. If they entail unusual problems of growing, the crop may be harvested by hand from plants growing wild, although today specialists produce most of the items in small demand.

Mail orders must be filled quickly. Most of the orders are received in a period of 3 months or so. Adequate facilities and workers to handle peak-load requirements are the perennial problems of the mail-order distributor. Most firms attempt to utilize their help and facilities to a greater extent by handling commodities that are in demand in other seasons.

Seeds are distributed to home gardeners also in several other channels, such as through schools and organizations, usually in conjunction with an educational or civic program.

THE HOME GARDENER can look to many sources for help in attaining success in his garden. The Garden Seed Sales Promotion Committee of the American Seed Trade Association offers through newspapers, radio, and magazines practical articles that give latest gardening techniques and tell what is new in seeds. All America Selections test new flowers and vegetables in trial gardens throughout the United States. Those selected by a panel of experts as outstanding are awarded All America Medals.

The writings of garden editors in magazines, newspapers, and books and bulletins of the Department of Agriculture, State colleges, and county agents are good sources of information on recommended practices.

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Handling Seeds of the Field Crops

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THIS YEAR an American farmer will buy 10 pounds of seeds to thicken a mountain meadow. Another may buy 100 thousand pounds to plant 10 thousand corporate acres. Because American seedsmen have built an efficient distribution system, both buyers will be able to get the best seeds for their purposes.

Behind their purchases lie the marketing, processing, and financial resources of hundreds of firms—handlers of seeds that are backed by the special skills of tens of thousands of farms devoted wholly or partly to the planned production of good seeds.

The marketing channels and practices that provide the hundreds of kinds and varieties of field-crop seeds may be simple or complex. There may be one contributive function or several.

The simplest marketing cycle is completed when one farmer sells his seeds to his neighbor. Millions of pounds move in that way.

Most distribution, however, calls for a more sophisticated chain of events. Distance between the production area and the planter, reliance on special cleaning techniques, research in plant breeding, storage, financing, and problems of handling broaden the base and add to the list of participants.

Seeds of field crops follow no normal route from producer to user. Most movement, however, involves a grower, a wholesaler, and a retailer. The activities of each vary widely, depending on the item handled. The size and location of any of the three segments