

Hawaii Cooperative Extension Service

HORTICULTURE

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SIX TIPS FOR SMARTER BORROWING TECHNIQUES

Responsible financial planning and reasonably accurate cash-flow projections are among the most critical needs to establish a solid borrowing relationship with a lending institution.

Facing inflation and high interest rates in most areas of the country, growers, wholesalers and retailers are challenged with the need to secure dependable financial resources to continue operating at a profitable level. With this in mind, there are six important tips to help develop and conduct a profitable borrowing relationship.

1. *Develop a Comprehensive Game Plan.* The small businessman has to plan and come into a bank with a comprehensive program when he looks to borrow money. This program should indicate what the money is needed for, how long it is needed and from where payment will come.

Part of such a plan should include the preparation of a financial statement by an independent auditor or accountant, balance sheet and profit and loss reports. An accurate cash-flow projection should be worked out to cover the duration of the loan.

Further, be prepared to personally guarantee the loan and maybe, provide a personal financial statement.

2. *Seek Short Term Loans When Possible.* Short-term loans for working business capital are traditionally easier to secure than are arrangements with longer pay-back periods. These loans usually paid off within a year are more accessible.

3. *Establish "Satisfactory" Banking Relationships.* A bank must have a "feel" for the ability of the borrower to conduct his/her business successfully. While a personal relationship with the bank's loan officer may not be necessary, it can help convey dependability. Beyond a personal aspect, a banker carefully judges the bank's overall relationship with the businessman when it comes to making lending decisions. Such merits as having introduced friends, relatives and other new business to the bank makes a "desirable customer" high up on the bank's priority list. It may be easy to get an appointment to sit down and talk about your needs, but getting the banker to really pay attention may be rather difficult. Thus, developing a strong banking relationship can be very beneficial.

4. *Watch Out for Overdrafts.* Writing overdrafts on business checking accounts is one sure way to hurt your credit rating with a bank.

5. *Provide High-Quality Financial Reporting.* To maintain a good banking relationship, consistent, accurate financial report is a must. A bank may require additional financial reporting during the course of the loan. This may be expensive, but it is necessary to the bank in terms of gauging the merchant's operation.

6. *Report Problems Promptly.* If you encounter difficulties in meeting loan payments, contact your banker immediately. He has developed a wealth of experience in the business world and, perhaps, can help you come up with a solution.

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Good banking demands effort from both the customer and the bank. A customer doing everything possible to earn desirable status with the bank can expect the bank to work at maintaining the favorable relationship as well. It is definitely a two-way street.

New York State Flower Industries Bulletin
No. 144, September, 1982

TEMPERATURE AFFECTS RATE OF RELEASE OF FERTILIZER FROM OSMOCOTE[®]

Florida horticulturists, B. K. Harbaugh and G. J. Wilfret, studied how temperature affects the rate of release of the fertilizer salts from two forms of Osmocote held in water for up to 96 days. Water temperatures of 60, 73, and 86°F were used with samples of Osmocote 14-14-14 (3-4 months calculated release) at 2.8 grams or Osmocote 18-6-12 (9-12 months calculated release) at 2.2 grams (equal amounts of nitrogen) placed in 400 ml water. Every 3 days the water was replaced and total soluble salts, NO₃, NH₄, K, and P in solution were analyzed.

They found that Osmocote 14-14-14 released 80% of its encapsulated nutrients in 48 days at 86°F, versus about 68% at 70°F. Similarly Osmocote 18-6-12 released nearly 70% of its nutrients at 86°F by 96 days and about 50% at 70°F.

When soil temperatures exceed the 70°F level at which the manufacturer calculates the release curves for their products, release is faster. The Osmocote 14-14-14 product had a functional life of 1½-2 months and the Osmocote 18-6-12 had a functional life of 3½-4 months at 86°F, not an unlikely temperature to encounter in a container soil during the summer.

Conclusions to draw from this work: Excessive soluble salts may occur during the summer months due to faster-than-expected release rates. Split applications of 14-14-14 may be more suitable with more frequent applications (or go to a 13.5-13.5-13.5 Osmocote which has a slower release rate which was not tested). The 18-6-12 formulation may be safer to use due to its slower release rate.

Florida Ornamental Growers Association
Newsletter 5(2) March/April 1982

BIOLOGY AND CONTROL OF INSECT PESTS

Aphids:

adult = 1/8 inch long; pear-shaped body with long legs and antennae; wide color range, often pale green. May be winged or wingless. Found on undersides of leaves, or on stems or on buds.

nymph = like small adults, wingless.

lifecycle = females reproduce continuously, usually live birth.

damage = honeydew and shed skins litter leaves; transmit virus diseases; cause stunting, curling, distortion of tender growth.

control = any insecticide labeled for aphids unless resistance is noted, then use Pirimor; natural enemies such as lady beetles or parasitic wasps.

Citrus Mealybug:

adult = mobile adult female is oval, about 3/16 inch long. Body covered with white wax and waxy tufts appear around margin of body. Male has wings and is similar to a whitefly. Female adult and young are found on undersides of leaves along veins or in crotches and crevices on the plant.

crawler = oval and yellow, similar to scale scrawler.

eggs = embedded in a white waxy mass extruded by the female.

lifecycle = 6-8 weeks in greenhouse. About 5 generations per year.

damage = honeydew; sooty mold; distorted growth and premature leaf drop.

control = Sumithion; juvenile hormone analogs such as kinoprene, methoprene.

The Maryland Florist
No. 228, April, 1981

NURSERY NOTES

Plants With Phytotoxicity to Methyl Bromide

Many growers use Methyl Bromide to sterilize their soil mix. This is a gas compressed to a liquid which, when exposed to atmospheric pressure, will vaporize and penetrate the soil. The soil should be aired for several days before use. Methyl bromide is highly toxic to humans. Growers have reported salvia and dianthus germinate and grow poorly in soil fumigated with methyl bromide. Germination of seed from the

following plants may also be reduced if sown in methyl bromide treated soil:

Ageratum	Helichrysum
Alyssum	Iberis
Antirrhinum	Lobelia
Aster	Matricaria
Calendula	Myosotis
Celosia	Nemesia
Chrysanthemum	Nierembergia
Cleome	Portulaca
Coleus	Salpiglossis
Coreopsis	Verbena
Dahlia	Viola
Digitalis	Vinca
Godetia	

Commercial Flower Grower Notes
University of Georgia, Dec. 1981

Sanitation

Empty benches should be steamed or treated with a drench of Terraclor and Truban. Walkways, potting areas, soil bins, wheelbarrows, etc. should also be cleaned and drenched. Where there is apt to be little or no soil, LF-10 (a hospital disinfectant) makes a good sanitizing agent. Don't forget to sanitize coolers as well.

Ohio Florists Bulletin
Sept. 1973

Foliage Plants

The 1981 net value of foliage plants sold (for indoor and patio use) increased five percent from a year earlier to \$329 million. Increases in Florida, Texas and Ohio more than offset a decrease in California. Growers used 154 million square feet of production area, up six percent from 1980. Growers are planning to increase the area used another four percent this year.

Florists' Review
April 8, 1983

Tax Break for Singles

A single taxpayer living alone does not qualify for head-of-household status, right? Wrong! A single person providing more than half the support for a parent or parents may qualify for head-of-household filing status and claim a dependency deduction. There is no requirement that the parents live with the child. The parents may continue to live in their own home or in a rest home.

Since the head-of-household filing status provides a lower tax rate than the single filing status, this deduction should not be overlooked. If this deduction was missed in the past two or three years, an amended return can be filed to reduce the taxes paid and claim a refund or credit.

Florida Foliage
July, 1981

Convention Costs Deductible

Travel, hotel and meal expenses incurred while attending business meetings such as conventions are deductible on your tax returns, but record keeping and documentation requirements must be followed. Records must be kept of:

1. The amount of expenses
2. Dates and distances traveled
3. The business purpose of the trip

The first two requirements will be satisfied if records are retained in a diary—with an accurate listing of all expenses. Each expense item must indicate date, place and business purpose.

Mileage, gas, tolls and other out-of-pocket expenses are also deductible. IRS agents customarily scrutinize travel expense deductions which appear to be "vacations in disguise."

It's good insurance to retain general documentation (such as a convention program book) to demonstrate the serious business nature of the meeting. The final indication of business purpose is the motivation for a participant's attendance at a meeting or convention.

The true test—and the one generally accepted as valid by IRS agents—is whether attendance advanced or benefited the business interest of the individual attending the conference.

Society of American Florists

FUSARIUM-TOLERANT CARNATION VARIETIES

Fusarium oxysporum dianthi is the No. 1 disease of carnations. It is particularly bad in warm climates in soils with poor drainage.

Sim varieties are very susceptible to *Fusarium*. Some non-Sim varieties, such as Orchid Beauty, have great tolerance to the disease.

Dr. Leonard Carrier, one of the first commercial carnation growers in the Encinitas area, sold his greenhouse operation about 12 years ago and started breeding carnations. His primary objective was disease resistance. All of

his seedlings have been grown in untreated soil, heavily infected with *Fusarium*. He started by crossing several sources of non-Sim carnations (including Orchid Beauty, a wild plant growing in Leucadia) and plants from South America.

After about 5 years, Dr. Carrier's seedling #929 showed extremely good tolerance to Fusarium Wilt. This seedling was tested by scientists at Berkeley, in Holland, Italy, and England and was proven to have the best disease tolerance, to both A & B strains of *Fusarium*, of any carnations compared. The disease tolerance is a dominant trait. In this seedling selection process over several years, undoubtedly thousands of good flower types have been lost due to disease. Finally, Dr. Carrier has "arrived" with six standard varieties, two spray types, and several other sprays coming along soon.

The mechanism of disease tolerance is still unknown. It was shown in England that the *Fusarium* fungus does invade Carrier's plants but, for some reason, the fungus cannot move far in the stem tissue.

Several growers in the Encinitas area have had field experience with Carrier varieties. We now know that it is best to fumigate or steam soil infected by *Fusarium* even before planting Carrier varieties. After a two-year cropping with Carrier varieties, a susceptible Sims crop replanted in the same area performs much better than Sims replanted after Sims. On badly infected soils, Carrier varieties way out-perform Sims, particularly in the second year of production.

In general, all of Carrier varieties break lower (or closer to the ground) than is typical of the Sim varieties. Carrier varieties don't show bottom "firing" of leaves, as Sim varieties often show after one year. Carrier recommends cutting high on the first flower crop in summer. After that a grower should count the stem-stand per unit area (20 stems per sq. ft. is often considered maximum density for mid-winter carnation production), and cutting lower than on Sims to keep stem-stand under control. Most of the Carrier varieties break more prolifically and tend to cycle faster than most Sim varieties. For these reasons, Dr. Carrier recommends a much wider plant spacing (only about 2 plants per sq. ft. of planted bed) on all of his present varieties, except "Big Red".

The varieties are as follows:

Big Red—taller than Sims, flower has no white blotch, variety will cut fancy grade on first summer flush and flower yield about like

Scania. Plant spacing is the same as Sims. Three-way tolerance to *Fusarium*, *Phialophora* and Rust.

Melody—pink, similar to "Anniversary". First flush will be standard grade. Flower size in summer is better than Sims. Flower yield about like Sims.

White Melody—good white, flower has no red blotch (as does Sims). Characteristics are similar to "Melody". The "Melodies" also have three-way tolerance to *Fusarium*, *Phialophora* and Rust.

Fiesta—orange background with almost unnoticeable small pink flecks. Fiesta will also cut mostly fancy grade on first summer flush. Flower yield is greater than Scania and taller than Sims.

Hestor—golden-yellow (no flecks). This variety breaks higher on the main stem, thus requiring a different harvest management than other Carrier varieties.

Lucy—orchid pink. This variety has a distinctive look and stands out from all others. Good yielder but needs harvest management. Most difficult for Sims growers! Very heavy breaking and very fast cycling. Must keep disbudding up-to-date.

Sprays (miniatures):

Juanita—yellow

Lady Di—purple, also resistant to Rust

The first plants of the Carrier varieties will be available in 1983. California-Florida Plant Corporation is planning to list "Lucy" in their 1983 catalogue. Possibly by 1984, all varieties will be available from both California-Florida Plant Corp. and Yoder Brothers, Inc.

To most carnation growers, Dr. Carrier recommends planting only one bed per variety, until they learn how to manage his plants.

In addition to Carrier's disease-tolerant carnations, there are some other very exciting kinds of carnations coming off the plant breeder assembly line. In Europe, four varieties resulting from interspecies crossing will be released soon in Holland. These are more or less single-petal flowers with a bright array of colors and patterns. They will be spray types.

Potted carnation plants are gradually gaining in popularity. Otay Nursery in San Diego County is producing two pot sizes year-around as an outdoor low-cost crop. These plants are grown from seed. The seed sources are either Goldsmith Seed Company at Gilroy, California, or Sakata in

Japan whose local representative is the American Seed Company.

Also from Holland are the "mini-mini" carnations. These are spray types with flowers about half the size of most spray carnations. Available now through P. Kooiji and Zonen, B. V., there are four varieties:

- Eolo* (lavender)
- Mammolo* (red)
- White Eolo* (white)
- Brontolo* (pink)

And finally. . . as announced by Goldsmith Seed Co. last January at the Carnation School in Watsonville, this firm is close to developing good cut flower carnation varieties that can be grown from seed.

Thus, there are several exciting possibilities in the realm of carnation production. But, the most exciting at the moment is the Carrier disease-tolerant varieties.

Flower Growing & Marketing
University of California, June, 1982

Because the microprocessor learns to perform tasks via magnetic tape, the unit to which it is attached can perform a number of chores. Theoretically, it's possible to have cassette tapes for an equal number of household jobs, such as walking the dog three miles while the human relaxes.

The system is not expensive and can have broad application. Farming with robots could be feasible within a few years.

Michigan State Ag. Expt. Sta.
Annual Report, No. 1, Winter, 1982

FOOD FOR THOUGHT

What's the difference between a tax collector and a taxi-dermist? Former IRS Commissioner Mortimer Caplan says, "The taxidermist leaves the hide."

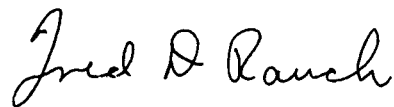
ROBOTS OF THE FUTURE

Mowing grass, raking leaves and even walking the dog might seem to be dull and repetitious chores, but the drudgery soon might be relieved with a robot lawnmower designed by MSU agricultural engineers.

The possibility has been demonstrated recently on the East Lansing campus by Trumun Surbrook and John Gerrish, the scientists who developed the robot lawnmower. It involves attaching computer equipment, known as a microprocessor, to a large riding lawnmower. The microprocessor enables the unit to operate independently of human guidance.

When the microprocessor is switched to the "learn" mode, its sensors are programmed as the user drives it once over the prescribed course—the perimeter of a lawn, for instance. Then, placed in the automatic mode, the mower completes the job while the human rests. Because the guidance system does not respond to outside interference—from a CB radio or an electronic timer in the kitchen, for example—it won't pick up a stray signal and malfunction.

NOTE: The use of trade names is for the convenience of readers only and does not constitute an endorsement of these products by the University of Hawaii, the College of Tropical Agriculture and Human Resources, the Hawaii Cooperative Extension Service, and their employees.



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