Delaware veg growers discuss production ideas

DOVER,, Del — Delaware vegetable growers took a look at several potential crops and a revolutionary new planting technique during their recent annual meeting in Dover

One highlight of the two-day event was a talk on fluid drilling of pre-germinated seeds by University of Florida's Herb Bryan, a nationally known authority on the subject

The technique actually originated in England about 20 years ago but is just catching on in the U S It calls for sprouting seeds, mixing them with a special gel preparation, and then planting them in the ground The system results in early emergence, better stands, and early and uniform maturity

Farmers in several states including Florida, Texas, Ohio and Michigan already are growing tomatoes and chile peppers this way on limited acreage

Bryan also reports excellent results in test plantings of radishes, okra, cucumbers, watermelons, tomtoes, celery, lettuce, potatoes, peppers, onions, sweet corn and cabbage

As the technique is perfected and field equipment is improved, observers expect to see wide adoption of this revolutionary cultural practice

Besides its other advantages, it offers low energy costs, reduced temperature-related problems with developing seedlings, and reduced soil crusting (especially if a bit of peatlite is dropped on top of the gelencased seed at planting)

It is possible to add fungicides, growth stimulants or nutrients to the gel to further encourage uniform stands, sturdier plants, and higher yields of top-quality produce The pregerminated seed can be planted either in bare ground or through plastic mulch

Delaware extension vegetable specialist Mike Orzolek told farmers present at the meeting that he has built a 4-row, 3-point hitch, fluid drill and will be using this next summer to plant some small plots of pre-germinated pepper seed in an effort to help area pepper growers avoid some of the disease problems associated with the use of transplants

He also hopes to plant small plots of cabbage and other vegetables this way on cooperating farms

Most farmers who are good managers are always on the lookout for alternate crops to grow Several presentations during the meeting concerned new crop possibilities for Delaware vegetable growers

Bernie Pollock of Rutgers University discussed the prospects for local dry bean production

Noting that increased soybean production in Argentina and Brazil could well result in lower prices for this crop in the future, he suggested that dry beans might be one good alternative crop to consider These provide high levels of usable protein and offer potential returns five times greater than soybeans on a per-acre basis

With the Port of Wilmington, Delaware growers have the opportunity to export dry beans to many parts of the world where this vegetable is the major protein source Pollock said there are several bean varieties suitable for Delmarva growing conditions

Another speaker, Ray Webb, described work he is doing with russet potatoes at the U S Department of Agriculture's Agricultural Research Center in Beltsville, Md Purpose of this work is to develop a quality russet suitable for Eastern growing conditions and competive with those now grown in Idaho, Oregon and Washington.

Two varieties are now available -- Bel Rus (which was developed in Maine), and Beltsvilles Russette

Because each potato variety has special needs, he advised farmers to try these on a small scale first while they learn how to get yields and specific gravity up Within the next five years Webb expects Eastern growers to have several other russet varieties capable of yielding good table stock on a level competitive with western-grown russets

Within 10 years, Delmarva could all have its own French fry plant as well, he said

A third cropping alternative—herbs and spices—was discussed by Elmo Davis, director of research for the McCormick Company Davis said it doesn't take much land to grow the amounts of herbs needed, but it can be a profitable enterprise with good management

Because growing herbs requires a lot of labor, he sees this enterprise working best as a family operation. Quality control must be excellent for your crop to be worth anything, he stressed And he cautioned farmers not to jump into production until they've explored all aspects of the crop – especially marketing

According to Davis, successful herb production depends on a number of factors. a dry season, limited acreage, suitable plant cultivar, and cultural practices.

U S herb crops include onions, garlic, chile peppers, parsley, basil, dill weed and dill seed, sage, oregano, savory and thyme Most of these are currently grown in the Southwest.

Frequent, irregular rainfall in the East is a problem in growing these crops because it can delay harvest. Timing is critical because plants need to be harvested when essential oils are at their peak

Davis also warned that it's hard for a new supplier to enter the herb and spice market

Self-feeding boosts feed intake

LITITZ — Putting early-lactating cows on a self feeding program is one way of boosting feed intake for top milk production

George M Ward, professor of dairy science of Kansas State, says the free choice method of feeding is both feasible and practical in herds large enough to have cows grouped by production. Cows allowed to eat all the grain concentrate and quality roughage they want in a balanced ration will maximize milk production, he says

Ward offers some precautions, however, when implementing such a feeding program Cows should be preconditioned to concentrate feeding two weeks before being self fed. and should be full of feed when introduced to a self-feeing program Enough quality roughage should be provided at all times "

He says the concentrate mixture should contain about two percent more protein than rations for the rest of the herd, as well as 1 5 percent sodium bicarbonate to prevent acid-base imbalance in the rumen

Sodium bicarbonate is an effective rumen buffer," he says

Cows produce sodium bicarbonate naturally in their saliva However, high energy rations, necessary for top milk production, can cause natural bicarb production to decrease At the same time, the more easily digested grain diets produce larger amounts of acid in the rumen

Without adequate buffering, excess rumen acidity interferes with normal appetite, feed efficiency, and milk and fat production Sodium bicarbonate mixed with the concentrate at a rate of 1 5 percent on an as fed basis will prevent these problems associated with excess acid

When adequate precautions are taken, cows may be left in the self-feeding program 45 to 50 days, says Ward, or until their milk production goes down below a predetermined level where it's not worth giving them the high energy ration "

Ward demonstrated the feasibility of a self-feeding program in the KSU herd, with Holstein cows that ate an average of 30 to 35 pounds of a grain sorghum-soybean meal concentrate along with alfalfa hay Milk fat tests averaged from 3 3 to 3 8 percent on the monthly DHIA tests