THE GARLIC PRESS August 1988

The

#2

Newsletter of the Garlic Seed Foundation of New York State dedicated to the production and improvement of garlic

.... WITH APOLOGIES:

Late winter has turned into early summer all too soon and the good intentions to have this out last month have gone unfulfilled. I took on the responsibilities of this Newsletter and have failed in it's timeliness. While working in the barn the other day, a member called thinking he'd missed an issue: this is #2, the "next" issue. We haven't had rain in three weeks, and as we approach the longest day of the year, we have begun cutting some of the seedheads as they appear. I can't tell how the lack of rain is affecting the plants as garlic and weeds both look healthy. So here is the next newsletter. I apologize to you all and hope that you will not judge adversely the GSF or the contributors or our intentions. To our credit, we have done very well answering letters and telephone inquiries, and thank you for your interest and support!



- * We have had questions about mesh bags and are researching sources now. Our idea is to propose a collective purchase (unless you can use 10,000, #5 bags!) Write if you have an interest in this purchase.
- * Brochure: if you have not seen, or would like some copies of the GSF brochure, please let us know.
- * Exposure has been good for the GSF this year and we've appeared in newspapers, magazines and Ag. Journals, did a talk show via the telephone on a N.Y.C. radio program, displayed at the Alternative Ag Conference (Ithaca), Mid-Atlantic Direct Marketing Conference (Lancaster, Pa.), Hudson Valley Federation of Co-Ops, and the NOFA-N.Y. Conference (Ithaca). We've been asked by N.Y.S. Ag. and Markets to submit an

- "R and D Proposal" in grant competitions and attend the "N.Y. Fresh '88" marketing show in Albany. We had no time to do or consider either.
- * While in Lancaster, I met a company representative for Caleb Marketing Services who educated me to the importance of "scented" personalized felt-tip pens in marketing, and assured me #13 did smell like garlic. It does, and members can pick theirs up at garlic day!
- * Please remember to take your camera out to your field from time to time. Part of Garlic Day this year will be slides of your place, equipment, experiments or "ways of doing things" that you want to share. Also, plan on bringing some of your garlic!
- * I took a job cooking in a restaurant on Friday, Saturday and Sunday nights (My Brother's Place in Sodus Point, N.Y.) I've added garlic dishes to the menu and garlic to everything. I have come to appreciate the peeling qualities, flavor differences and the real thing compared to the "processed garlic" available to restaurants.
- * Please consider this as your Newsletter and use it to share ideas, or comment on ours. In the next - next Garlic Press, I'll share some of the interesting correspondence we've received. Please contribute stories, ideas, recipes.

David Stern







THE INTERNATIONALITY OF GARLIC:

Match the country with the name:

France Nimiku Italy Chesnok Ajo Japan Knoflook Poland Germany Aglio Knoblauch Spain Russia AiIDutch Cosnek

Compare your choices to the proper matchings on page 6.

BUYERS - SELLERS:

The Foundation has received calls and letters from individuals and companies interested in buying or selling garlic. While we are not interested in brokering garlic, we do want to serve our members. If you are interested in taking part in this exchange, please write or call and we'll send you a form to complete and return. GSF will make this information available for brokering purposes only.

GSF SEED STOCK AVAILABILITY AND POLICY:

After several years of trial and documentation, GSF will make available a limited quantity of seed to members. Please note: In Garlic Press #3 there will be a procedure to order seed stock (on a first come - first served basis, with priority given to N.Y.S. farmers and members.) Quantity will depend on harvest. Please give it some thought.

RAK RE-INVENTS THE WHEEL:

Roger Kline, Sr. Extension
Associate at Cornell University and
Advisor to the GSF, has announced the
results of a fertility trial done with G
animal manure applied to garlic! Once thought important before the invention
of synthetic fertilizer, manure isn't
used much any more in the Vegetable
Crops Department experiments, trials or
classroom. Heresay or not, #11 (EIF/GSF
Trial '87, Ithaca, N.Y.) displayed an
average increase in weight of .67
oz/bulb and an average diameter increase
of .6 inches/bulb. The trial was spring
planted. There has been no comment or

official announcement from Cornell University.

(Some of us found the experiment intriguing. A few points of fact might clarify this casual report. The cow manure was applied in April at the rate of 40 tons/acre. It was tilled into the soil and cloves planted about two weeks later. Lots of things could have occurred such as: very slight bulb formation, plant injury from the manure, extended growing period... What did happen is bulb formation 30-40% larger than same-planting-date garlic without manure, and not much less size than fall planted garlic.)

<u>DEFINING AND REFINING THE FOUNDATION'S</u> PURPOSE:

This past winter has been a time of reevaluating the direction of the foundation and formalizing its goals. Organizationally, the mission will continue to focus in three areas related to the development of garlic as a commercial vegetable crop in N.Y.S. These areas are: (1) compiling garlic information and research and extension services, (2) seed stock development and (3) marketing.

RAK has agreed to continue coordinating information and research related to garlic. This extremely important activity involves research which includes identification and examination of new strains, cultural experiments, establishing methodology collecting and compiling data. Where possible, the studies will be carried out at several sites around the state and with one or more of the established strains available for sale. The research will follow prescribed methodologies as compared to the second activity - study and collection of information relating to garlic.

In this area the Foundation will, under the skilled direction of Sue Thompson and Andrea, act as a library compiling any garlic related information ranging from trivia to published research. Your assistance is

essential for the gathering of this information. Send us your dissertation or tid-bits relating to garlic.

A clearing house and extension service comprise the third aspect of the Foundations mission in this area. The Newsletter, to be published four times per year, is one vehicle for sharing. Garlic Day, hosting lectures and a speaker's bureau are other ways that this body of knowledge will be made available to the public. Individuals wanting information on a particular subject may contact Dave Stern directly. A fee will be charged for this service to defray expenses.

Seed stock identification, multiplication, and marketing to growers is the second major area of Foundation involvement. There are many aspects to this process that will insure selection of strains for outstanding production, processing and culinary characteristics. At the present time, strains have been selected from existing seed stock. Actual garlic breeding and tissue culturing etc. has not been a Foundation objective. However, this year, experiments in tissue culturing are planned, and any efforts will be reported on in future issues of the Newsletter.

Foundation seed stock has been carefully selected from over 60 strains in North America and Europe. These have been grown in at least three different locations in the state. Data is maintained on bulb and clove size and weight, plant harvest ratios, growth characteristics including drought tolerance, rates of maturity, disease resistance etc. This information along with Garlic Day judging, based on visual appearance, processing and taste testing, determine which strains will be grown for seed stock. The entire process occurs over 3-5 years, is carefully monitored, and is designed to select superior strains of garlic.

The third area of foundation involvement is marketing. This area is the least defined and under current projections will evolve over the next 5 years. It is clear that for garlic to become a profitable specialty crop in N.Y.S., identification of marketing systems and garlic product lines will be essential. Presently the focus of attention is on data collection relating to seasonal pricing, and sources of garlic. Informal discussions with processors indicate that current demand for good quality garlic far exceeds the supply. Storage is a critical factor in insuring a steady supply. This is an area currently being explored by the Foundation. Watch upcoming issues of the Newsletter for RAK's research in this area.

The Garlic Seed Foundation has formalized its mission this year and established numerous short and long term objectives to produce quality garlic seed stock, and provide professionally based information relating to its cultivation, marketing, processing, and consumption. This is a critical stage of organizational development, and one that has gone smoothly. We at the foundation look forward to expanding this exciting growth. Your ongoing support and involvement is invaluable. Certainly there is a place for garlic in the fabric of New York State's agriculture, and that of other regions.

Doug Bowne



TRIVIA:

The aroma of garlic has dogged it throughout its history, and from time immemorial has made it the target for ribald jokes - and not without reason. Its smell is so penetrating that even when a clove is rubbed into the soles of the feet the odor is exhaled by the lungs.

DR. SAKAI'S GARLIC:

This could be called the "societal garlic of nouveau taste." To Dr. Sakai, marketing is everything. For two bulbs, weighing 1 1/2 oz., the price is \$1.29. Think how much your fields would be worth if you could receive even half that amount as a grower.

Dr. Sakai's claim to notoriety is a garlic which leaves your breath garlicfree. By a special process using normal garlic, he neutralizes the production of the element in garlic that causes "offensive breath odor." He claims to do it without changing the garlic's natural flavor, aroma, and nutritional benefits. His little package is covered with appealing key words and salable sayings. Often they are ideas we've long recognized as garlic lovers, claiming studies suggest that fresh garlic could: "(1) reduce the risk of cancer, (2) help prevent heart attacks, (3) fortify the immune system, (4) help prevent circulatory diseases and (5) reduce levels of blood cholesterol and triglycerides." Our fresh, unprocessed garlic offers the same benefits at much lower prices.

Dr. Sakai: "Garlic has been doing unsociable things to breath for 7,000 years."

"You'll never be embarrassed by garlic after-odor again."

"You'll turn out great meals without ever turning off good friends."

We don't begrudge Dr. Sakai his niche in the market place. If his garlic increases the number of garlic users, then bless him. Those who are hardy garlic consumers eat this vegetable without regard to its social implications. By good taste, principle, and economics, they would not pay \$11 per pound for their favorite seasoning. Sociable or not, we wear our breath proudly.



THE PROBLEM OF DISEASES:

As garlic becomes a more commonly grown crop in New York, we are seeing more disease affected specimen in the field and in the Cornell diagnostic lab. We are monitoring this problem, but for now, have no good controls because we have not studied the cycle of the diseases. Kevin Cook, an undergraduate and field supervisor for specialty crops, was prompted to write a short paper about two storage diseases. He found material pertinent to the northeast very scarce and had to extrapolate information from California and elsewhere. Those two diseases which seem most prominent in New York are white rot and blue mold, both caused by fungi. White rot will affect garlic in the field, invading the plants at their bases, causing yellowing, wilting and collapse. White hyphae will grow on the dead tissue. Blue mold is caused by penicillium and is normally seen in storage bulbs. They will show a bluish-green mold on the surface, usually at the base of the cloves, and between individual cloves within the bulb. Occasionally, blue mold will be severe in the field, causing yellowing, wilting or death of the plants.

Cultural control of white mold means moving garlic out of the infected field for 5-15 years. That is the longevity of this fungus in the soil. The penicillium, which causes blue mold, cannot survive long in the soil without an appropriate host. It is normally carried by diseased bulbs and cloves into the field when they are replanted. Fall planted garlic is better protected from blue mold than garlic planted in the spring.

After several years of the GSF struggling with these diseases, trying to identify them and find controls, a plant pathologist has offered to visit growers' fields and analyze what problems we have. He is Jim Lorbeer and he has spent most of his professional time working with onion diseases. Garlic is susceptible in some degree to most of the onion diseases. It remains to be seen how much time Jim can spend with garlic problems and how much he can help our group of growers. He is motivated to help us because he feels garlic will become much larger an important crop in New York than it presently is. We hope he becomes very involved and active, and effective in helping us fight our garlic disease problems.

Let us know if you have field or storage disease problems with your garlic, its severity or crop loss, and if you'd like to be part of our survey research.

<u>MEMBERSHIP IN THE GARLIC SEED FOUNDATION</u> <u>OF NEW YORK STATE</u>:

Membership in the Garlic Seed Foundation of New York State (GSF) is for those who PRODUCE, PROCESS or CONSUME garlic. The fee for membership is \$8.00 annually for individuals or families. Memberships shall be run for one year.



Benefits of the GSF membership are:

- * First class mailing of the GSF Newsletter
- * A 50% discount for Garlic Day admission
- * Members have priority for seed stock purchases
- *.Producer/processor/marketing network

Why a membership drive for the GSF? The GSF is a non-profit organization dedicated to the improvement of garlic and its production in NYS. During the first three years of operation, the foundation was funded by worker contributions and inked support from the Vegetable Crops Department of Cornell University.

Over this period, the initial objectives of the Foundation were actualized. They were to: (1) identify and multiply the seed stock suited for the climate and soils of NYS, (2) to evaluate the demand for garlic, (3) to research production systems and cultivation practices, and make all this available to growers.

The GSF is entering its second phase of development which is marked by sharing and expanding the organizations achievements. Extending membership to producers, processors and consumers is one element of this process. Membership will create a network of individuals committed to furthering the goals of the Foundation. Membership will also provide some monies to defray expenses incurred in the ongoing Foundation work; research, seed stock production, marketing and communication through mailing, phone and general correspondence. No money is used for salaries.

At this time, there are no guest or privileged memberships, as we do not feel that this is fair to each of us. We have compensated the cultural worker who developed our logo a years membership and we exchange newsletters with the NYS Vegetable Growers

Association (which is very supportive of our work).

Contact:

N.Y.S.V.G.A.

Jean Warholic

Box 356

Ithaca, N.Y. 14851-0356

WATCH OUT LONG ISLAND POTATO:

In fields where potatoes have been grown by generations of L.I. farmers, a "new" crop is breaking through the sandy loam. Dominic Antignano and his family are busy cultivating garlic. Besides field trials for the Garlic Seed Foundation, several varieties are growing in this Cutchogue plot. You can contact Dominic at (516) 734-5069 to talk about garlic, trade seed stock or help weed.

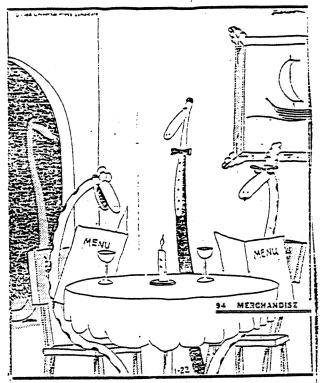
The New York State Garlic Seed Foundation would like to thank Stanley Simchick and his family for the use of their land for the 1988 field trials.

ANSWERS TO GARLIC QUIZ:

France (Ail) Germany (Knoblauch)
Italy (Aglio) Spain (Ajo)
Japan (Nimiku) Russia (Chesnok)
Poland (Cosnek) Dutch (Knoflook)

BRIC KAT EMT

EV GARY LARSON



"Yell, this may not be wise on a first date, but I just gotta try your garlic wharf rats."







SURVEY OF GROWERS USE OF COMPOST AND MANURES

There have been a significant number of questions about the use of cover crops, manures, and compost. In order to form a complete and all-purpose response, we want to address as many aspects of these topics as growers have questions and concerns. Thanks to Tom Richard from the Department of Agricultural Engineering, we are prepared to produce such a fact sheet.

| Nam | ne: Address: |
|-----|--|
| | es of vegetables grown: |
| Wha | t percent of your land do you cover crop each year? |
| Do | you amend your soil with composted plant material? YES NO |
| Do | you add manure to your fields? YES NO If YES: Do you apply the manure fresh? YES NO Do you compost the manure first? YES NO Are you able to turn the compost pile? YES NO Please describe any problems you have had using manure: |
| (su | you receive any organic material from off-farm sources? ch as leaves, food processing waste, aquatic weeds YES NO YES, please describe the material and how you use it: |
| Do | you have a need for information about composting? YES NO Basic general information YES NO Specific, in-depth information YES NO |
| | t up to three specific topics or questions you have about composting or use of organic amendments to the soil that we should answer in a fact et: |

PLEASE RETURN THIS COMPLETED SURVEY TO ROGER A. KLINE DEPT. VEGETABLE CROPS, 157 PLANT SCIENCE, CORNELL UNIV., ITHACA, NY 14853



:0T



RETURN TO: BARLIC SEED FOUNDATION OF NEW YORK STATE ROSE VALLEY FARM ROSE, NEW YORK 14542-0149



The Third Annual Garlic Day of New York State

at Rose Valley Farm Rose, NY

Begins at the Rose Grange on route 414 9 AM, 17 September, 1988

More information to come

2.