The National Junior Horticultural Association: A Program for Youth and Leaders in Horticulture

J. Lee Taylor
Dept. of Horticulture, Michigan State Univ., East Lansing, MI 48824

"I dropped a seed into the earth. It grew, and the plant was mine." This statement by Liberty Hyde Bailey, taken from A Plant at School, 1903, demonstrates the natural interest that youth have in plants. It was with this interest in mind as well as a need for more horticulture students at the undergraduate level that the National Junior Vegetable Growers Association was founded 50 years ago by Grant Snyder, Univ. of Massachusetts; Arthur Pratt, Cornell Univ.; Howard Brown, The Ohio State Univ.; and Owen Trask, Univ. of Connecticut. Snyder headed the organization for over 35 years and presided over the organization's name change to the National Junior Horticultural Association to include fruit, flowers, and ornamental horticulture as well as vegetables.

Specific purposes of NJHA are:

- to promote and sponsor educational youth projects and activities which enhance understanding of horticulture;
- to develop good citizens who will develop a basic understanding of nature and an acceptance of responsibility for the environment in which they live;
- to acquaint youth with the many varied career opportunities, both vocational and professional, available in horticulture; and
- to provide young people and their adult leaders with new experiences in group participation, cooperation, and leadership.

NJHA's program usually operates through and with existing youth programs, such as 4-H and the Future Farmers of America (F.F.A.), but youths also can participate directly in NJHA projects without any other organized group affiliation. In most instances, the NJHA program provides more depth and breadth than other programs. Projects range from caring for houseplants to growing several acres of fruit or vegetables; from production and marketing to experimenting and improving the environment; from a demonstration on propagating woody ornamentals to an illustrated talk on making a corsage. Some states have formed their own chapter of NJHA and have conducted their own training sessions, workshops, and contests.

The age limit for NJHA projects is 15 through 22. Young America Horticulture Contests, sponsored by NJHA and formerly the Flower and Garden Foundation, include gardening, plant propagation, environmental beautification, and experimental horticulture. These contests are open to youth, 8-years-old and younger (who are able to print their report) through 14 years of age. Young contestants (3rd, 4th, and 5th graders) often submit more interesting and original reports than older contestants.

Projects and activities of NJHA fall mainly into 2 major types: report-type projects, where individuals or groups carry out a project and then complete a written report describing and illustrating what they did and how; and performance-type projects, where individuals or teams compete in a variety of contests, including demonstrations, public speaking, and horticulture (judging, plant identification and knowledge). State-wide contests are held in many states to select contestants for national contests held during the NJHA Annual Convention.

Around 1 Oct., participants in report-type projects forward their reports to their state chairperson (usually an extension specialist or agent) for evaluation. The state chairperson, often with a committee, determines the winner in each project who then attends the Annual Convention and is interviewed by an evaluation committee. The evaluation committees, 1 for each report-type project, also will evaluate each contestant's report form before meeting the contestants. A 3rd, and selective, program is the Scottish Gardening Scholarship providing a full-year of horticultural study and work experience in Scotland for 1 youth. Longwood Gardens, Inc., and the Scottish-American Heritage, Inc., cooperate in conducting this program.

The Annual Convention is a 4-day event (Friday through Monday) held in a different city each year in late October. Attendance ranges between 350 and 500 delegates, two-thirds between 15 and 22 years of age, and the remaining delegates being state leaders, advisors, teachers, coaches, and other adults. Contestants in the Young America Contests are discouraged from attending the convention, except to receive an award if they live in the general vicinity. The 4-day event usually adheres to the following schedule:

- Friday evening — Welcome Banquet and entertainment;
- Saturday — Contests, interviews, Careers Banquet;
- Sunday — Inspirational service, workshops, business meeting, local tours, state dinners;
- Monday — All-day field trips to horticultural and other educational enterprises, Awards Banquet.

Workshop topics vary from year to year, but may include such topics as cacti and succulents, bonsai, international foods, heritage gardening, flower arranging, and photography. Delegates may participate in 2 different workshops. Tours visit different horticultural establishments depending on the location of the convention, such as nurseries, greenhouses, botanical gardens, orchards, processing plants, distribution centers, packing plants, and markets. Results of contests and project evaluations are announced at the Awards Banquet.

NJHA’s program of projects and activities has been endorsed or approved by many organizations and agencies which include: the 4-H Division of the Cooperative Extension Service, American Society for Horticultural Science, American Horticultural Society, American Association of Nurserymen, American Seed Trade Association, Society of American Florists and Ornamental Horticulturist, The National Grange, The Na-
tional Council of Garden Clubs, The Flower and Garden Foundation, Longwood Gar-
dens, and many state 4-H and F.F.A. organ-
izations and horticultural associations.

The Board of Trustees of the National
Junior Horticultural Foundation, Inc., is the
governing body of the National Junior Hor-
ticulture Association. Included on the Foun-
dation Board are representatives from horticulturally-related corporations and as-
ocations, Land-Grant Colleges, the Coop-
erative Extension Service, and other youth-
serving agencies.

The Foundation Board appoints the pro-
gram chairman, program vice chairman, re-
gional program leaders, advisor, and the
executive secretary to coordinate the national
program of NJHA. The national program
chairman appoints national project leaders,
committee chairmen, and state program
leaders. At the annual national convention
of NJHA, 8 officers are elected (from the
senior youth division) to serve a 1-year term.
Also, a number of young people are design-
ated as youth coordinators to provide as-
sistance to the state program leaders.

The NJHA is financed through voluntary,
tax deductible contributions from corpora-
tions, associations, agencies, and individuals
who are interested in youths in horticulture.
ASHS has contributed to the NJHA Program
for many years, and it is only through such
contributions and interest that this youth pro-
grahm has survived.

It is always difficult to assess the value of
an organization like NJHA objectively, but
through my association with the organization
for the past 25 years, I am convinced that
the youths participating in the NJHA pro-
gram and attending the Annual Convention:
- learn that there is a lot more to horti-
ticulture than they realized;
- find that there are some good career
opportunities in horticulture;
- become motivated to acquire addi-
tional education exceeding their initial
plans;
- find that horticulture can be a good
hobby; and
- find that their outlook on life is
broadened by exposure to individuals
from different backgrounds and by
visiting other geographical areas.

For many 15- and 16-year-old youths, at-
tendance at the Annual Convention often
is their 1st out-of-state trip, or their 1st trip
focused on an educational theme. It is not
uncommon for young people to remark on
their way home from a convention that it was
the best experience that they ever had. For
most, the loss of a few school days was not
a sacrifice when compared to the educational
experiences gained. Almost all youths pay a
substantial part of the cost to attend the con-
vention, even though many horticulture or-
ganizations and businesses help sponsor their
trips.

One of the greatest challenges facing NJHA
is to attract more young participants, when
they have the time, interest, and enthusiasm
for horticultural efforts. Once they enter high
school, it becomes difficult to find time to
conduct a project or to report on it after it
has been completed.

Information about the NJHA program can
be obtained by writing to National Junior
Horticultural Association, 5885 104th Street,
Fremont, MI 49412. A listing of national
personnel, state chairmen, and officers is
available, along with enrollment forms and
descriptions of projects and activities. There
is no enrollment or membership fee.

An Alumni Program is being developed,
and former members are invited to attend
alumni functions during the Annual Conven-
tion. The best time for alumni and visitors
to attend the convention to observe contests
in action is on a Saturday. About 150 dele-
gates will be involved in the morning Hor-
ticulture Contest, and another 100 in the
Speaking of Horticulture' and Demo-
stration Contests in the afternoon.

The need for a horticultural organization
for youths is just as great today as it was 50-
years-ago when the National Junior Vege-
table Growers Association was founded.
Simply stated, the purpose of the NJHA Pro-
gram is to turn kids on to horticulture by
involving them in a project, they also learn
about careers, citizenship, cooperation, and
leadership. It is always a rewarding experi-
ence to see young people 'discover' horti-
culture, knowing that you played a part in
making that discovery possible.

LETTERS

IN DEFENSE OF THE J-14 HYDRAULIC PRESS

I wish to point out a discrepancy in the
conclusion on the value of the J-14 hydraulic
press by A.H. Markhart, III, and B. Smit-
that the J-14 readings prevent reliable pre-
dictions of the Scholander pressure bomb for
leaf water potential measurements.

In the specific case of Phaseolus vulgaris
(pinto bean type), the authors found a linear
regression of $y = 0.99 + 1.39x, r = 0.75,
n = 154, with x (independent variable) being
the J-14 press readings and y Scholander's
standardized leaf water potential values. De-
spite the significance of r and that only 11
points of 154 are beyond the confidence level
(10%) (see their Fig. 1a), the authors con-
cluded the use of the J-14 jack press. They
used pieces of folioles of bean trifoliolate
leaves and established the endpoint as the
appearance of fluid at the uncut edges.

We found a well-fitted linear model on
black beans of $y = 0.556 + 1.055x, r = 0.97,
n = 25 within a range of -3 to -10 bars for leaf water potential that allowed us
to discriminate among genotypes for suscep-
tibility or tolerance to water stress. We also
obtained acceptable calibration curves be-
tween J-14 press and pressure-bomb mea-
surements in grape (Vitis vinifera) cultivars
(Fig. 1) useful for a stress physiology project
involving an antitranspirant application. The
data we found are in agreement with results
obtained by G. Campbell (personal com-
munication) on red canary grass (Phalaris
arundinacea), wheat (Triticum aestivum),
sumac (Rhus glabra), and ponderosa pine
(Pinus ponderosa).

A critical factor in the use of the J-14 jack
press is the subjectivity involved in estab-
lishing the endpoint. The release of water
from tissue compressed between the glass
window and the elastic membrane is rather
subjective, and it is sometimes difficult to
stop the pump handle instantaneously. We
use 2-cm diameter leaf disks compressing
diagonally the main vein of the foliole (for
beans) or lobule (for grape leaves). Water
released to from a drop-shape wet area in
front of each vein cut end was selected as a
very consistent endpoint. Another improve-
ment was to change the manometric gauge

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Lincoln C. Peirce, Science Editor, Dept. of Plant Science, Nesmith Hall, Univ. of New Hampshire,
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