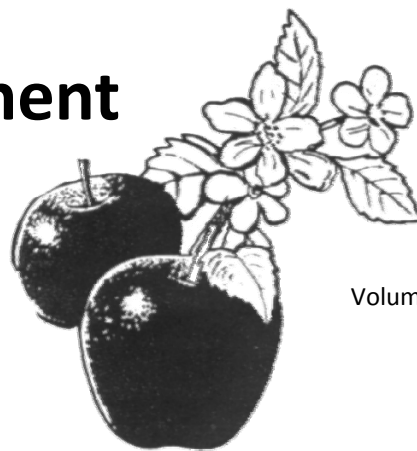


Midwest Apple Improvement Association Newsletter



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2010 President's Message

The annual meeting of the Midwest Apple Improvement Association was held this past January in Lexington, Kentucky in conjunction with the Kentucky State Horticultural Association. The Lexington area provided an outstanding venue to discuss MAIA's past operations and plan our future direction. I would like to thank Ed Fackler for organizing and planning the meeting.

The mission of MAIA has always been important but may have gained even greater urgency in the face of the 2009–2010 commercial apple market. A large Midwest apple crop combined with low prices gives pause to the grower who considers new planting of common apple varieties. The future appears much brighter for a MAIA member when we see the real possibility of apple planting consisting of fruit with superior taste and texture. These new varieties will certainly delight both our customers and ourselves. Now that represents real sustainable agriculture.

So, let us move our organization forward with renewed energy and purpose. Get involved, keep your dues current and plan for success. MAIA may be the organization that has the most impact on your operation in the coming years.

David Hull

MAIA Board Meeting Minutes

January 3, 2010 6:00 p.m. Lexington, Kentucky

In attendance: David Hull, President; Felix Cooper, V-President; Jim Eckert, Evan Milburn, Mitch Lynd, Steve Doud, Ed Fackler, Jules Janick, Jozsef Racsco, Diane Miller, David Doud, Bill Dodd, Gregg Bachman, Lee Brumley, Chris Doll, Ray Armstrong. Anna Whipkey, Secretary-Treasurer was absent; Diane Miller recorded minutes in Anna's place.

Financials: \$22,000 in MAIA account. 41 members have paid \$1000 or more and are members in good standing; there are 19 members who have partially paid their \$1000 commitment.

Minutes from the 2009 meeting were sent out by Anna for review prior to this board meeting. Minutes were accepted without revision (David Doud motion; Mitch Lynd second; unanimous approval).

Financial report was accepted (David Doud motion; Jules Janick second; unanimous approval).

OLD BUSINESS:

Jules Janick requested an update on the MAIA relationship with Dawes Arboretum. Mitch Lynd provided an overview and update. MAIA has planted approximately 10,000 seedlings at

Dawes in a fenced area. The fence was provided by MAIA. No formal relationship between MAIA and Dawes has been achieved. MAIA owns all the seedlings within the fenced area with no royalty due to Dawes. Dawes has mown between seedling rows regularly. Dawes has not provided any further assistance in seedling care. Mitch, Gregg Bachman and others have planted the seedlings, provided occasional mouse bait, herbicide and labor in perennial weed control. The next batch of MAIA selections will come from this planting which ranges in age from 6–7 years old down to 1 year old. There are many seedlings of Honeycrisp × Goldrush in this block along with small lots of numerous crosses (including some Kazakh crosses). The trees need care and are growing at far less than optimum. Mitch does not anticipate labor help from Dawes with these trees. Discussion ensued about how to take care of these seedlings. \$2500 was allocated for MAIA tree care in 2010 at Dawes (Jim Eckert motion; Gregg Bachman second; unanimous approval). Joe Burnham has donated a 300 gallon spray to MAIA for use at Dawes. Mitch Lynd will follow up on figuring out how to get the trees cared for.

NEW BUSINESS:

Jim Eckert applied for and received an Illinois Specialty Crop grant for \$20,000 to raise seedlings, propagate selections and do second testing at 3 Illinois sites. These will predominately but not exclusively be seedlings from Eckert's current planting. It was not determined by the MAIA board which or how many trees would be propagated through this grant. The MAIA 2010 seedlings (estimated at 3,000) will go to Eckert's (Felix Cooper motion; Gregg Bachman second; unanimous approval). These include some with a red-fleshed parent and some with a late blooming parent. **(ACTION ITEM)**

Diane Miller applied for and received an Ohio Specialty Crop grant for \$56,000 to raise seedlings, propagate selections and do second testing (location not specified). A discussion ensued about how to select seedlings for

second test. Mitch estimated 47 MAIA seedlings had been selected over the years with interesting traits; Diane upped the estimate to 60 MAIA seedlings if the crisp group (Fuji × Honeycrisp) located at David Doud's were included. A discussion ensued about where to locate second test plantings. Ed Fackler recommended Eckert's, Lynd's, and Mercier (Georgia). 60 seedlings × 4 replications of each seedling × 4 sites = 960 trees. These seedlings would include the best from all the MAIA current seedling plantings (Eckert, Dave Doud, Steve Doud, Lynd, Bachman, Jim Moore, Simmons, Armstrong). It was moved by Felix Cooper that 4 trees × 4 sites × 60 second test selections be aimed for (didn't catch who seconded; unanimous approval). It is hoped that wood can be cut in February, sent to Wafler's and trees available in Spring 2011. A discussion ensued about what rootstock/s should be used for second test seedlings. Bud 9, a strain of M9 (337), and Geneva 11 were deemed acceptable. All trees would be paid for by the Ohio Specialty Crop grant and provided at no charge to testers. Jules Janick advised to simplify the labeling of the test trees. **(ACTION ITEM—figure out which seedlings to propagate and get them propagated) (ACTION ITEM—figure out for sure where to plant the second test trees)**

Mitch Lynd reported that there were some test trees available in Spring 2010 for any MAIA member who wanted to be involved in second test efforts. These trees are available at no charge to those willing to grow and report on them.

Mitch Lynd reported the \$62,000 had been collected over the years from the membership as dues and that this amount had been leveraged extensively through grants achieved by the MAIA. He will write an article about this for the MAIA newsletter. **(ACTION ITEM—write newsletter article on good deal of MAIA membership)**

A discussion occurred about the advantages and disadvantages of limiting membership in MAIA.

Jules Janick, Jim Eckert, Bill Dodd and Diane Miller were appointed to discuss this issue and propose a way forward. **(ACTION ITEM—figure out what MAIA membership means now and in the future)**

The discussion of membership rights led to a discussion of how to protect propagation, production and marketing of any new varieties resulting from the MAIA effort. It was suggested that a cooperative be formed to manage varieties. Bill Dodd, David Hull and Gregg Bachman were appointed to develop a concept paper about how to move best MAIA material into commercial production. **(ACTION ITEM—figure out how to protect and commercialize MAIA material)**

A brief discussion of material in the MAIA pipeline occurred.

Seeds available to grow as seedlings in 2010: David Doud has 1bu of apples containing seeds of 13T139 × Ralls; and 1bu of apples containing seeds of Honeycrisp × 13T139. 13T139 has dependable cropping traits. Steve Doud has approximately 1 bu Giant Russian × GoldRush apples from which seeds can be collected. Does anyone else have seeds to grow into seedlings in 2010?

Seedlings to either be re-grown in the nursery or outplanted in the field: Diane Miller has approximately 1000 trees of open-pollinated late bloomer (Edward VII) from Steve Doud which were grown from seed in March 2009 and planted in the nursery in Jun 2009. They will need to either be grown another year in the nursery or field planted somewhere in Spring 2010. As previously mentioned, Jim Eckert will receive 3,000 seedlings (red-flesh parent or late-bloom parent) to outplant at his orchard.

Others?

An MAIA scientific committee was appointed to determine what crosses should be made in 2010 and beyond: Jules Janick, Mitch Lynd, Ed Fackler, Diane Miller. **(ACTION ITEM—what crosses to make)**

Diane Miller suggested that 18 MAIA selections be tested in consumer taste panels at the Fabulous Food Show in Cleveland in November 2010. She needs at least 30 and preferably 60 apples to have enough for consumer slices and for quality analyses. Please keep this opportunity in mind as we balance the need for fruit with that for good scion wood for propagation.

Notes added later: Emmanuel de Lapparent suggested planting references with second test trees. These known varieties would be on the same rootstock and same location. This would help define harvest time of the second test selections. The references would also be put in storage for comparison.

MAIA Annual Meeting

Mark your calendars now for the dates of Nov. 11–12, 2010 for the Annual MAIA meeting which will be held in conjunction with the Fab Food Show at One I-X Center Drive, Cleveland, Ohio (www.fabulousfoodshow.com/Attendee/TheMarketPlace.aspx).

More details will be sent later this fall.

Finance Report 2009

INCOME

Dues	\$8,525.00
Interest	\$186.55
Total	\$8,711.55

EXPENSES

Grow trees	-\$900.57
Treasurer	-\$800.00
Postage	-\$68.80
Office supplies	-\$32.09
Legal	-\$1,225.00
Total	-\$3,026.46
Balance	\$22,093.18

International Fruit Obtention Apple Evaluation Protocol

Emmanuel de Lapparent, from International Fruit Obtention (IFO), an integrated tree fruit company operating worldwide with headquarters in France introduced the MAIA membership to his company at our annual meeting in Lexington, Kentucky this past January.

IFO engages in apple breeding, nursery production and marketing, apple production, storage, packing, sales, and cultivar management through a network of associations, partnerships, and subsidiaries located in major apple production regions worldwide.

Emmanuel shared with us of some of the details of their apple breeding program and that their company had an interest in placing 4 or 5 of our promising selections in level 2 evaluation trials in France where our selections would be compared to new apples from other breeding programs.

He said three to five thousand seedlings are started in their greenhouse every winter and then subjected to intensive care with regard to light, nutrients and water. Seedlings reach 2 meter in height or about 70 internodes by early September. When they pass 70 internodes of growth extension they leave juvenility behind and additional growth is capable of flower bud initiation. Mature buds are then inserted into the base of M9 rootstocks. By late winter these trees are cutback and grown during year 2 into field ready finished trees that will be fruiting in years 3, 4, and 5 in a standard commercial M9 format similar to what we are evaluating in years 11, 12, and 13.

This is also how the Washington State apple breeding program is managed. This is one of the reasons why the annual operating budgets of these breeding programs is in the hundreds of thousands of dollars. Since our work is mostly done by volunteers at little to no cost we feel less compelled to quickly recover our modest investment. Given their investment, a keen

understanding that time is money and tremendous worldwide market competition; urgency and excellence are not an option but a requirement for survival in a high risk, high stakes endeavor.

While our goals are similar, the approach of the MAIA is more laid back and easily within reach of folks of modest means. It remains to be seen whether our traditionally slower, low cost, low risk approach will yield results satisfactory enough to continue being of interest to MAIA growers or whether a growing sense of urgency will cause our membership to opt for a more aggressive business plan.

Advanced evaluation in their program consists of 3 levels. Level one trees are chosen from the field of thousands during years 3, 4, and 5 where harvest and storage data is collected. Some will appear to be uniquely desirable and 4 trees of each will be propagated onto M9 roots for establishment in their Level 1 evaluation block.

LEVEL 1: 4 trees ea., appear to be uniquely desirable with 400 now in Level 1. Five to 10 years pass before moving onto Level 2

LEVEL 2: 20 trees each, look promising for the European market. Approx. 12 now in level 2. Five to 10 years pass with wood sent to experiment stations throughout Europe, fruit and trees shown to industry and retail markets for feedback. Market strategy is developed during this phase.

LEVEL 3: Hundreds of trees in pilot blocks at commercial growers, 12 now in Level 3. During this pre-commercialization phase pack outs can be disappointing. Five to 10 years before large scale commitments for commercialization proceed.

Mitch Lynd