NW MICHIGAN APPLE MATURITY REPORT #1
September 6, 2006

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

General Comments - If you are interested in having your fruit tested, drop off a 10 to 12 apple sample at the NW Station on Mondays, if possible. The fruit should be picked randomly from the outside portion of the trees and should be large in size and free of blemishes with the stem attached. Ethylene levels have been noted high throughout the state this year, likely the result of this summers exceptional heat. Higher than usual ethylene, combined with crop load is resulting in high pre-harvest fruit drop in McIntosh and other drop susceptible varieties.

Zesta - Mature (1 sample). Firmness at 14.9 lbs. Starch Index is at 5.8

GingerGold - Mature (1 sample). Firmness at 15.0 lbs. GingerGold tends to soften quickly even before ripening. Starch level is 4 with brix level at 13.9. Harvest has begun in the area. Background color should just be starting to turn yellowish at the time of harvest. Fruit that ripens to the point of full yellow will not hold up well in storage.

McIntosh - Approaching mature (1 sample). Firmness at about 14.0 lbs., down from 17.6 lbs last week. Starch index at 2.8 up from 2.0 last week. Brix level at 12.3. Color has improved to 72 % from only 50% last week. Some drop has been noted as the fruit size and tend to crowd each other off the limb.
**HoneyCrisp** - Immature. This variety needs multiple pickings over several weeks for premium quality fruit. Watch for first 2 to 3 apples per tree to color for the first picking. Harvest of immature Honeycrisp has been noted throughout Michigan - this will hurt the Honeycrisp deal in the long run if it continues into the future.

**Gala** - Immature (1 sample). Firmness at 21.4 lbs., down from 22.7 lbs. last week. Starch index has increased by 0.5 to 1.9 and brix levels are up to 11.8. Early ripening / red strains may be mature at this time for spot picking.

**STATEWIDE REPORTS**

**Southwest** - Gala is being spot picked with some blocks on their 3rd picking.

**Southeast** - Mac - some harvest. Gala - spot picking. Honeycrisp - 1st picking on early sites. Cortland - immature

**Ridge / Clarksville** - Excellent color and fruit size, fruit seems looser than normal. Gala - color picking, stripping red strains. Mac - color picking. Honeycrisp - spot picking (5% mature)

**Mason / Oceana / Manistee** - Gingergold and Paulared are being harvested. Honeycrisp nearly ready for 1st picking. Some drop in Macs

**NW MICHIGAN APPLE MATURITY REPORT #2**  
**September 13, 2006**

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

**General Comments** - If growers are interested in having fruit tested for maturity, a 10 to 12 apple sample should be dropped off at the NW Station on Mondays, if possible. The fruit should be picked randomly from the outside portion of the trees and should be large in size, free of blemishes, and with the stem attached. Ethylene levels are high throughout the state this year, which is the likely result of this summer’s exceptional heat. Higher ethylene combined with crop load has resulted in some high pre-harvest fruit drop in McIntosh and other drop susceptible varieties.

**GingerGold** - Mature (1 sample). Firmness at 14.6 lbs, GingerGold tends to soften quickly even before ripening. Starch level is around 4 with brix level at 13.7. Harvest is underway in the area. Background color should just be starting to turn yellowish at the time of harvest. Fruit that ripens to full yellow will not hold up well in storage.

**McIntosh** - Approaching mature (4 samples). Firmness around 16.5 lbs, and the starch index at 3.9 up from 2.8 last week. Brix level at 12.1. Color has improved to 76% from 72% last week. Some drop has been noted as the fruit size, and the apples crowd each other off the limb.

**HoneyCrisp** - Immature (2 samples). This variety needs multiple pickings over several weeks for premium quality fruit. Watch for first 2 to 3 apples per tree to color for the first picking. Harvest of immature Honeycrisp has been noted throughout Michigan - this will hurt the Honeycrisp deal in the long run if it continues into the future. Firmness: 19.3, starch index: 4.6, brix: 13.2.
**Gala** - Immature (4 samples). Firmness at 21.8 lbs., similar to last week. Starch index has increased to 3.5 this week, and brix levels are up to 13.4.

**Empire** - Immature (1 sample). Firmness at 22.7, starch index at 1.1, brix at 11.7, and color at 76%.

**STATEWIDE REPORTS**

**Southwest** - Most Gala harvest is finished. Many Empires have been harvested for taffy apples. Jonathans have good firmness, but need color.

**Southeast** - Finishing Gala harvest this week and moving to Macs. 2nd-3rd picking of Honeycrisp.

**Ridge / Clarksville** - Finishing Gala harvest this week-excellent size on Galas. Some Mac harvest has begun. Honeycrisp: 1st-2nd picking.

**Mason / Oceana / Manistee** - Began Gala harvest--nice firmness. Some Mac harvest has started.

**NW MICHIGAN APPLE MATURITY REPORT #3**

**September 20, 2006**

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

**General Comments** - If growers are interested in having fruit tested for maturity, a 10 to 12 apple sample should be dropped off at the NW Station on Mondays, if possible. The fruit should be picked randomly from the outside portion of the trees and should be large in size, free of blemishes, and with the stem attached. **Reminder for storage operators using 1-MCP:** recommendations state that fruit should be treated with 1-MCP within 7 days of harvest (3 days for McIntosh).

**McIntosh** - Mature (2 samples). Firmness around 16.5 lbs. and the starch index at 4.5, up from 3.9 last week. Brix level at 12.8. Color has improved to 90 % from 76% last week. Some drop has been noted as the fruit size, and the apples crowd each other off the limb.

**HoneyCrisp** - Mature (2 samples). This variety needs multiple pickings over several weeks for premium quality fruit. Many blocks have had two pickings at this point. Firmness at 16.6 lbs., down from 19.3. Starch index at 7.0, up from 4.6; brix level at 12.7.

**Gala** - Mature (4 samples). Firmness averaging 21.5 lbs., down slightly from last week. Starch index is at 3.1 this week, and brix levels are at 12.6. Color is excellent at over 90%. Three of the four samples were in the mature range for long term CA Storage.

**Golden Delicious** - Immature (2 samples). Firmness at 20.7 lbs. and starch index at 1.8. Brix level at 14.3.

**Empire** - No samples this week.

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IdaRed - Immature (1 sample). Firmness: 21.9 lbs. Starch index: 1.1. Brix: 12.3. Color on this sample is excellent at 98%.

STATEWIDE REPORTS


Mason / Oceana / Manistee - McIntosh - finishing harvest. Gala - suitable for long term CA. HoneyCrisp - nearly finished. Empire - nearly mature, may begin this weekend. Jonagold - waiting for color. Golden Delicious - immature

NW MICHIGAN APPLE MATURITY REPORT #4
September 27, 2006

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

General Comments - If growers are interested in having fruit tested for maturity, a 10 to 12 apple sample should be dropped off at the NW Station on Mondays, if possible. The fruit should be picked randomly from the outside portion of the trees and should be large in size, free of blemishes, and with the stem attached. Statewide reports are indicating that firmness is running about 1# less than normal and starch index readings and color are more advanced than normal. NW Michigan is not as far advanced in maturity as we started out. This is due to the cooler conditions that have prevailed over the past 3 to 4 weeks.

This weeks maturity samples from NW Michigan were taken from south central Leelanau County. Maturity estimates should be adjusted for blocks in warmer or cooler areas.

McIntosh - Mature (1 sample). Firmness at 15.1 lbs, and the starch index at 5.1, up from 4.5 last week. Brix level at 12.7. Color is excellent at 90%. Harvest of McIntosh is virtually finished.

HoneyCrisp - No samples this week. Most Honeycrisp have been harvested excepting the more northern or coolers sites.

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Gala - Mature (3 samples). Firmness averaging 20.5 lbs., down 1 lb. from last week. Starch index is at 3.1 this week, and brix levels are at 14.3. Color is excellent at over 90%. All three of the samples were in the mature range for long term CA Storage.

Golden Delicious - Approaching mature (2 samples). Firmness at 18 lbs., down about 2 lbs from last week. Starch index at 2.8 up from 1.8. Brix level at 15.2. Blush ranges from 5 to 20%.

Empire - Entering mature range (1 sample). Firmness at 17.9 lbs. and starch index at 3.5. Color is excellent at 82% and the brix level is 13.7. Some harvest has taken place for the taffy apple market.

Jonagold - Mature (2 samples). Firmness at 18.4 lbs. and starch index at 5.5. Brix levels at 13.4. Color on red strains is excellent and only fair on standard strains. Harvest may be delayed where color improvement is needed.

IdaRed - Immature (no samples taken this week).

Red Delicious - Anticipated maturity date for long term CA storage is Oct. 8th (1 sample). Firmness at 18.9 lbs. and starch index at 3.0. Brix level at 13.1. Some early strains may be ready prior to the 8th.

STATEWIDE REPORTS

Southwest - Gala, Honeycrisp, Jonathon and Jonagold - harvest finished. Red and Golden Delicious - are in the acceptable to mid term CA range. IdaRed - approaching mature. Rome - entering mature range (some color bleeding into the flesh).


NW MICHIGAN APPLE MATURITY REPORT #5
October 4, 2006

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

General Comments - If growers are interested in having fruit tested for maturity, a 10 to 12 apple sample should be dropped off at the NW Station on Mondays, if possible. The fruit should be picked randomly from the outside portion of the trees and should be large in size, free of blemishes, and with the stem attached. We are entering the crunch time for apple harvest with many varieties beginning to mature at once. This is common and generally happens about the time that Empire is about mid way through harvest.

This weeks maturity samples from NW Michigan were taken from the south central and East Leland/Gills Piers areas of Leelanau County. Maturity estimates should be adjusted for blocks in warmer or cooler areas.

Gala - Over mature (4 samples). Firmness is averaging 19.6 lbs., down 1 lb. from last week. Starch index is at 5.4, up from 3.1 and brix levels are at 14.2. Color is excellent at 95%. All four of the samples were waxy.

Golden Delicious - Mature (3 samples). Firmness is at 17.5 lbs., down about 0.5 lbs. from last week. Starch index is at 4.5, up from 2.8. Brix level is 15.7. Blush ranges from 15 to 30%. The samples tested are ready for long term CA Storage.

Empire - Mature (1 sample). Firmness is at 17.5 lbs. and starch index at 3.9. Color is excellent at 86% and the brix level is 15.7. Harvest is nearing completion.

Jonagold - Mature to over mature (3 samples). Firmness is at 18.3 lbs. and starch index at 6.4, up from 5.5 last week. Brix level is 16.4. Color is excellent on red strains and only fair on standard strains. Well colored Jonagold are ready for harvest.

IdaRed - Immature (3 samples). Firmness is at 17.3 lbs. and starch index at 2.4. Brix level is 12.7. Color on all three samples is excellent around 80%.

Red Delicious - Entering mature range (3 samples). Firmness is at 19.8 lbs. and starch index at 2.9. Brix level is 13.2. Two of the three samples are ready for long term CA storage.

Rome - Entering mature range (3 samples). Firmness is at 22 lbs. and starch index at 3.2. Brix level is 13.0 and color is 100%. Many of the sampled fruit had color beginning to bleed into the flesh.

Northern Spy - Immature (3 samples). Firmness is at 20.6 lbs. and starch index at 2.4. Brix level is 13.0 and red color ranges between 25 and 70% with no change in background color.

STATEWIDE REPORTS

Southwest - No report available as of this time.
Southeast - No report available as of this time.

Ridge / Clarksville - No report available as of this time.

Mason / Oceana / Manistee - No report available as of this time.

NW MICHIGAN APPLE MATURITY REPORT #6
October 11, 2006

This year the NWMHRS will again be testing apples for maturity. Results will be sent via fax and email to past apple maturity list subscribers and results will be put on the pome fruit section of the code-a-phone (947-3063). The maturity newsletter and code-a-phone will be updated weekly on Wednesdays. If you have not received this information in the past and wish to subscribe to the list, please contact the NWMHRS (946-1510 or nwmihort@msu.edu).

General Comments - This will be the final report of the season. If you have samples that you would like to have tested, feel free to bring them in and we will run them for you. We are entering the crunch time for apple harvest with many varieties beginning to mature at once. This is common and generally happens about the time that Empire is about mid way through harvest.

This weeks maturity samples from NW Michigan were taken from the south central and East Leland/Gills Piers areas of Leelanau County. Maturity estimates should be adjusted for blocks in warmer or cooler areas.

Gala - No samples tested this week. Gala is beyond the maturity level for anything but fresh sales.

Golden Delicious - Mature to over mature (2 samples). Firmness is at 17.3 lbs., down slightly from last week. Starch index is at 5.8, up from 4.5. Brix level is 14.3. Blush is at about 25%. One of the two samples is ready for mid term CA storage, while the other sample is over mature and should be placed in short term storage or be harvested for immediate sale.

Jonagold - No samples tested this week. Most of this variety is harvested. Fruit that is not already picked should be placed in short term storage or be harvested for immediate sale.

IdaRed - Entering the mature range (2 samples). Firmness is at 18.2 lbs. and starch index at 3.2, up from 2.4 last week. Brix level is 13.6. Color is excellent at around 90%. These samples should be ready for long term storage at the end of this week.

Red Delicious - Mature (2 samples). Firmness is at 20.2 lbs. Starch index is at 3.9, up from 2.9 last week. Brix level is 14.1. Both samples are ready for mid to long term CA storage.

Rome - Mature (3 samples). Firmness is at 21.4 lbs., down slightly from last week. Starch index at 4.2, up from 3.2 last week. Brix level is 14.3 and color is 100%. Many of the sampled fruit had color beginning to bleed into the flesh. Rome is ready for long term CA based on these samples.

Northern Spy - Mature (1 sample). Firmness is at 20.6 lbs. Starch index at 3.4, up from 2.4 last week. Brix level is 14.7 and red color averages about 70% with no change in background color. Spy is mature for long term storage based on this sample.
STATEWIDE REPORTS

**Southwest** - Red and Golden Delicious are nearly finished. Idared and Rome are being harvested for long term CA Storage. Fuji and Braeburn can be harvested if well colored.

**Southeast** - No report available as of this time.

**Ridge / Clarksville** - No report available as of this time.

**Mason / Oceana / Manistee** - Red Delicious is entering the mature range for long term CA. Rome - mature. Idared - expected to be mature in the next 5 to 7 days