Apple Maturity

Apple maturity is earlier by about two weeks this year compared to the average. Some early summer apples have already “gone by”. Because of the April freeze, we have too few Paulareds for measuring maturity. For other common varieties, starch index measurements started today with the results listed below.

Zestar! - 3.1. Flavor and texture indicate this variety is ripening unevenly.
Spur-type McIntosh – 2.5
Standard-type McIntosh – 2.1
Honeyscrisp – 1.0

Starch index is used as an indication of when to harvest for long term storage rather than an indicator of when to pick for immediate sale. The starch indices reported in this newsletter are meant to track the degree of ripening, and are not intended as a rule for picking dates. McIntosh apples that will be stored longer than four months should be harvested at a starch index in the range of 4.0 to 5.0 using the Cornell chart. For a storage duration of two to four months, harvest at an index of 5.0 to 6.0 should prevent excessive softening.

Picking for long term storage requires some consideration for the prevention of storage scald. When some varieties are in cold storage or CA storage longer than three months, they develop browning in the skin. McIntosh, Cortland, and red Delicious are susceptible. Gala, Empire, Honeycrisp and Golden Delicious do not normally develop storage scald.

Storage scald is prevented by postharvest application of scald inhibitors. SmartFresh (1-MCP) and diphenyamine (NoScald) are the most commonly used materials. Each has a different mode of action and differing effects on fruit quality. SmartFresh is used for slowing ripening and loss of firmness, but also provides scald control in most varieties, but not Cortland. Diphenylamine is used for scald control, but also provides tolerance of high carbon dioxide that occurs in controlled atmosphere storage. The right material depends on variety and storage conditions, but these two can also be used together. These materials are described on page 135 of the Pest Management Guide.
Dihvidiedadesylamine was traditionally applied as a drench, but can now be applied as an aerosol. It can also be applied before or after a SmartFresh application. With the aerosol application, there is no need to dispose of a drench, and where decay is minor, there is no need for a fungicide. Where decays have been a problem, an aerosol fungicide can also be applied. These products are distributed and applied by Decco. For more information, contact Decco customer service at 1-800-233-3226 or John Holowid at (814) 720-5763, www.deccous.com.

SmartFresh is used to slow quality loss in stored apples. The degree to which it works depends on the stage of maturity at harvest and the storage duration. Where harvest is delayed to promote red coloring, SmartFresh can help maintain quality, but the storage life will be shortened by the advanced maturity. For more information, contact Kieth Culver at (585) 738-2189 or by email at his address: kculver@agrofresh.com.

Glen W. Koehler  
Associate Scientist IPM  
Email: glen.koehler@maine.edu  
Voice: 207-581-3882 (within Maine: 800-287-0279)  
Pest Management Office, 491 College Avenue  
Orono, ME 04473-1295  
http://pmo.umext.maine.edu/apple/

Dr. Renae Moran  
Extension Tree Fruit Specialist  
Email: rmoran@maine.edu  
Voice: 207-933-2100 ext 105  
Highmoor Farm Ag. Exp. Station, P.O. Box 179  
Monmouth, ME 04259-0179  
http://extension.umaine.edu/agriculture/programs/tree-fruits/

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If you are a person with a disability and will need an accommodations to participate in this program, please call Highmoor Farm at 933-2100 to discuss your needs. Receiving requests for accommodations at least 7 days before the program provides a reasonable amount of time to meet the request, however all requests will be accepted.