

Overview of 2012 SWQC Wheat Quality Evaluation Results

*Evaluate the quality of soft wheat
experimental lines and varieties for
the enhancement of quality*



Contributing Soft Wheat Breeding Programs

- Set 1 Carl Griffey, Virginia Polytechnic Institute and State University
2013412
Yorktown
Merl (check)
- Set 2 Greg Marshal, Pioneer Hi-Bred International, Inc.
Pioneer 25R34
Pioneer 25R40
Pioneer 25R47 (check)
- Set 3 Clay Sneller, The Ohio State University
Bromfield
Malabar (check)
- Set 4 Barton Fogleman, Syngenta
SY Harrison
Oakes
- Set 5 Herb Ohm, Purdue University
P04606
P05247
P05222
INW 1021

The Soft Wheat Quality Lab's involvement:

- Solicit breeding programs for newer soft wheat lines
- Clean the grain as it comes in
- Take Falling Number measurements
- Temper and Milling
- Send out flour to each of the cooperating labs
- Analysis of each variety
- Compile data as it comes in from the cooperating labs
- Generate the report
- Coordinate efforts to present the data at the Soft Wheat Quality Council meeting

Cooperating Labs:

ADM Milling; Shawnee Mission, Kansas

ConAgra Foods; Omaha, Nebraska

Horizon Milling; Minneapolis, Minnesota

Kellogg's; Kalamazoo, Michigan

Mondelez International; Toledo, Ohio and East Hanover, New Jersey

The Mennel Milling Company; Fostoria, Ohio

Siemer Milling Company; Teutopolis, Illinois

Syngenta-AgriPro; Berthoud, Colorado

Wheat Marketing Center; Portland, Oregon

USDA-ARS Western Wheat Quality Laboratory; Pullman, Washington

USDA-ARS Soft Wheat Quality Laboratory, Wooster, Ohio

Cooperating Lab's Analysis

Labs provide data for the project based on what they normally perform for their mills.

Most labs perform solvent retention capacity and baking analysis.

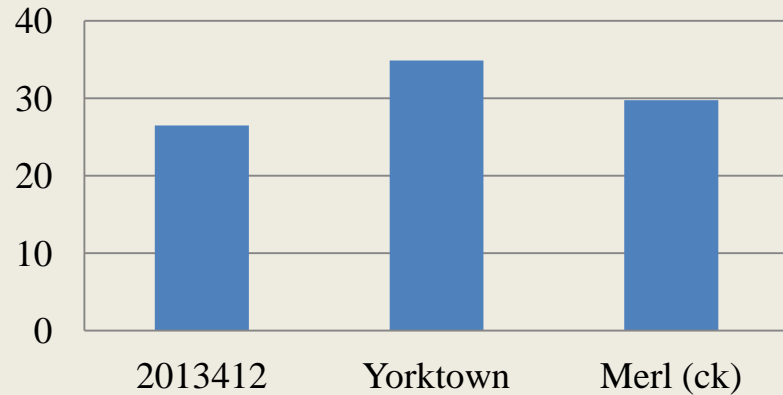
Baking analysis includes: AACCI-10-50D (Macro Sugar Snap Cookies), Biscuits, Noodles, and Sponge Cakes.

Other analysis includes: Alveograph, Rapid Visco Analyzer, and Farinograph

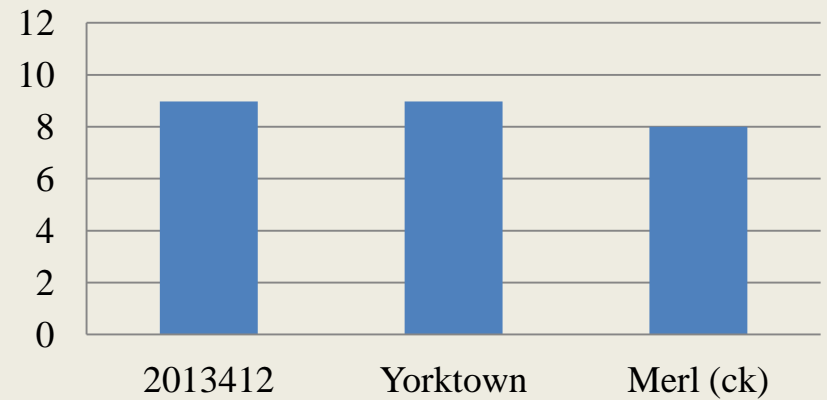
The labs also provide an Evaluation sheet stating pros/cons as well as End Product Performance.

Set 1: Virginia Polytechnic Institute and State University

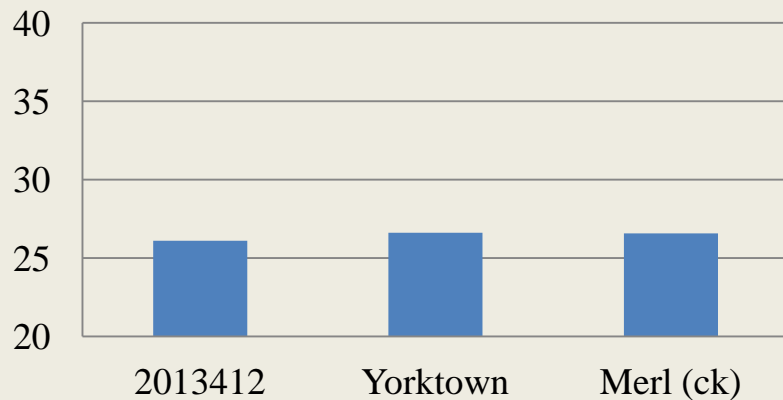
SKCS Hardness



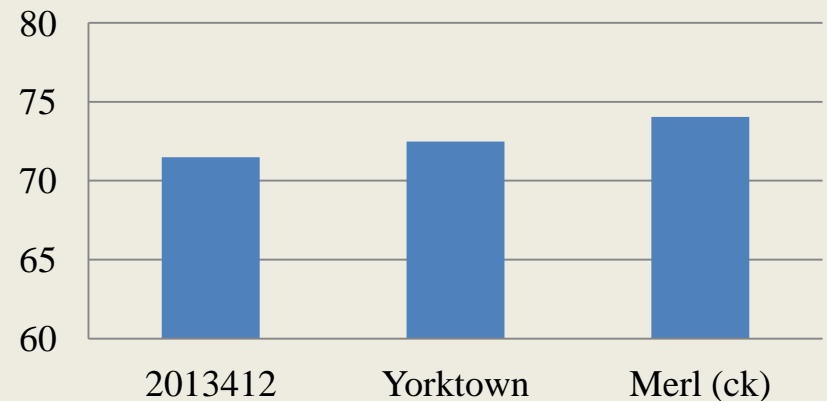
Flour Protein



Miag Break Flour

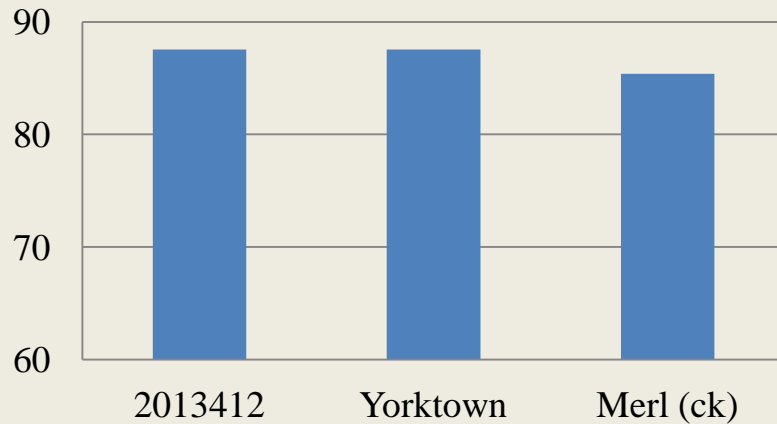


Miag Straight Grade

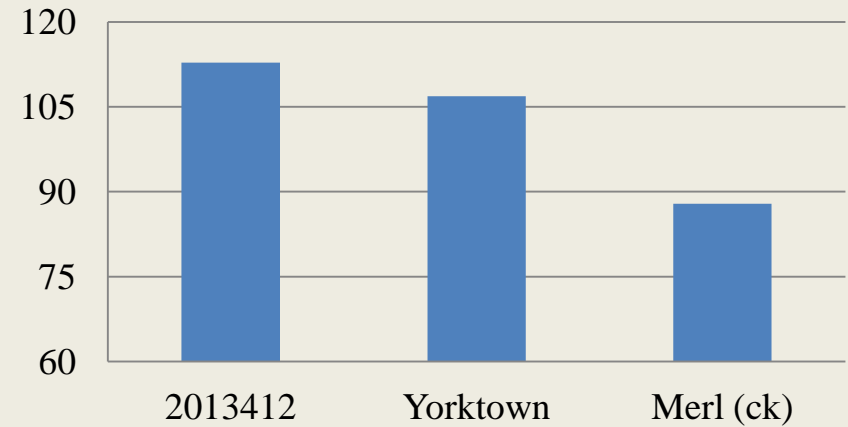


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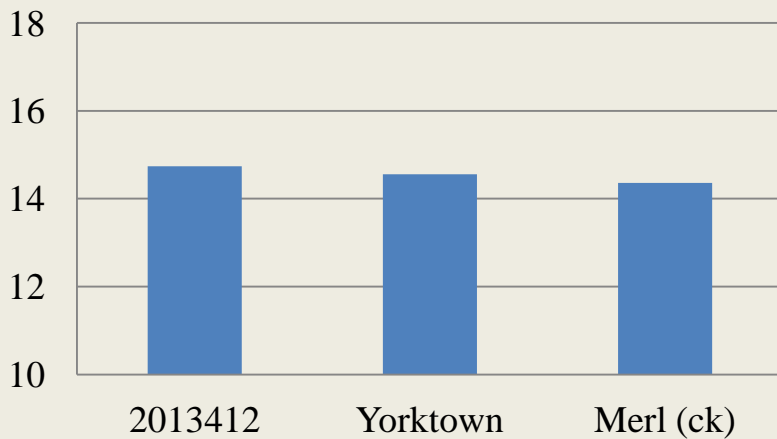
SRC Sodium Carbonate



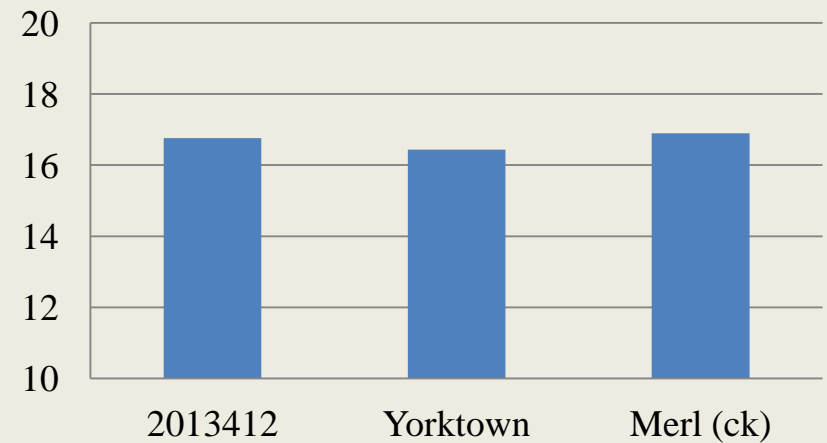
SRC Lactic Acid



Wire-cut Cookie Diameter

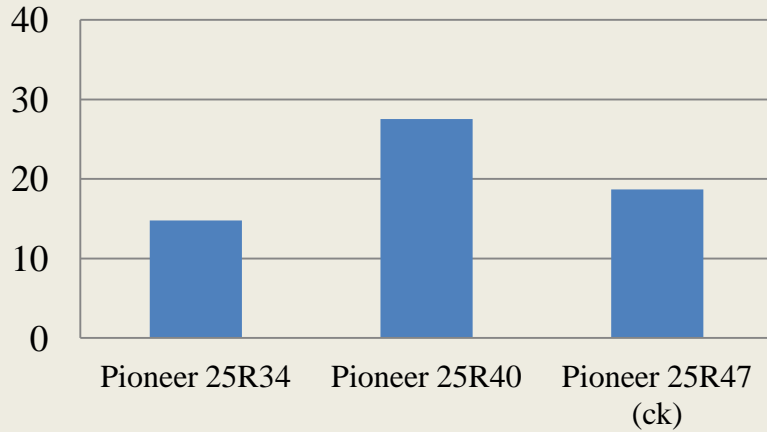


Sugar Snap Cookie Diameter

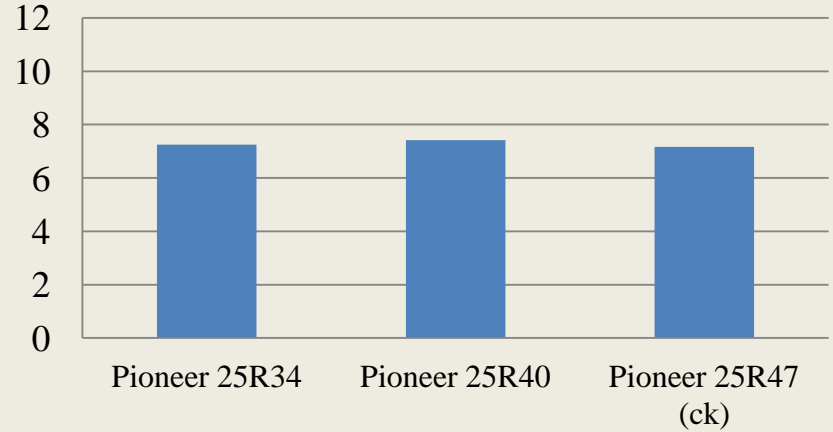


Set 2: Pioneer Hi-Bred International, Inc.

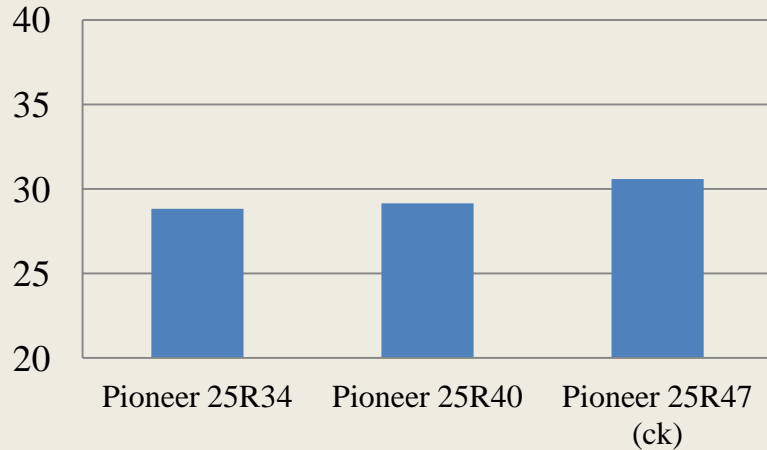
SKCS Hardness



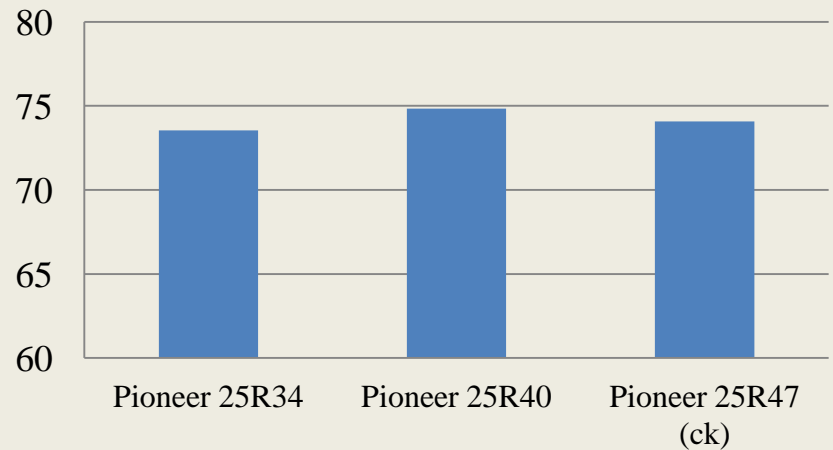
Flour Protein



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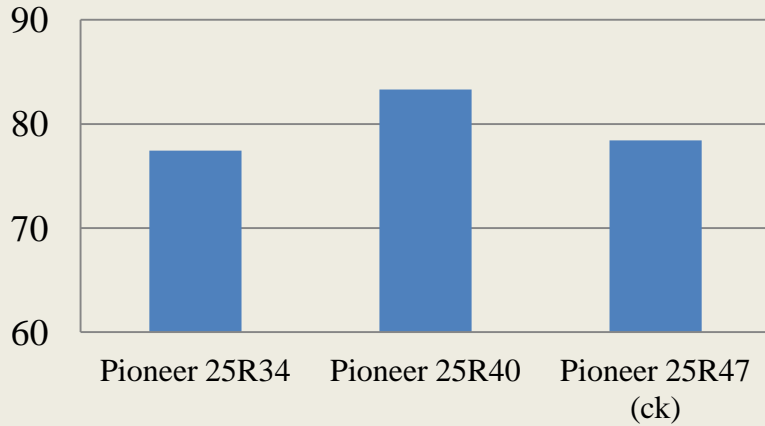


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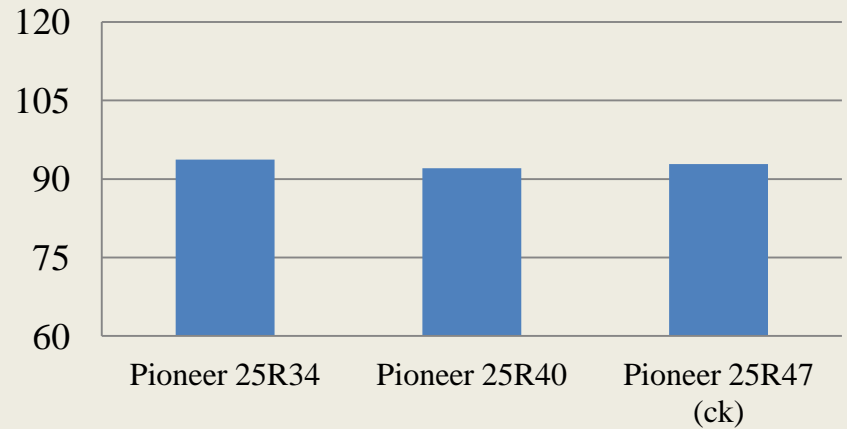


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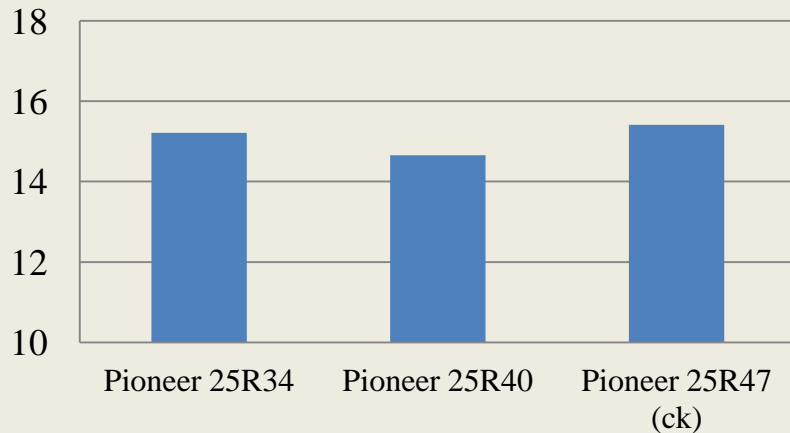
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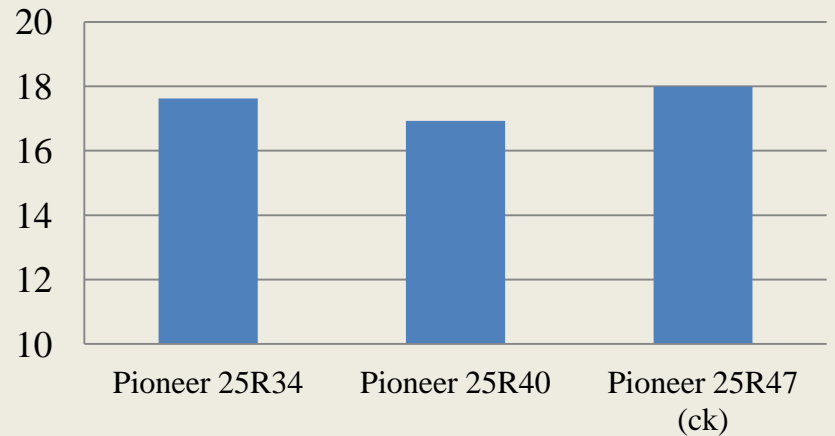
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Wire-Cut Cookie Diameter

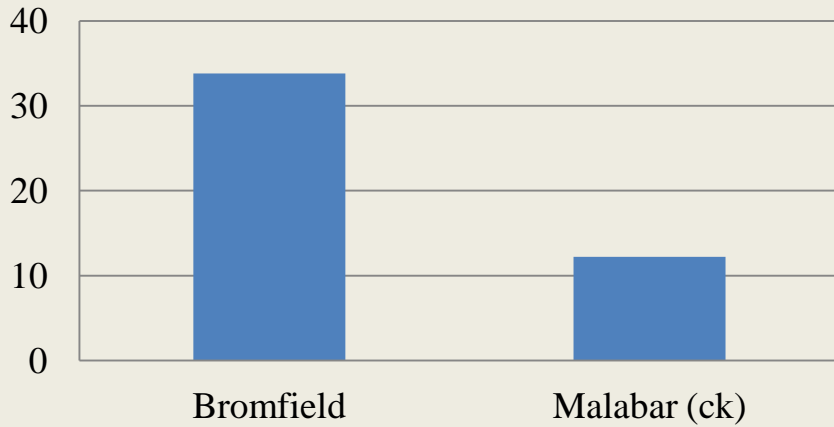


Sugar Snap Cookie Diameter

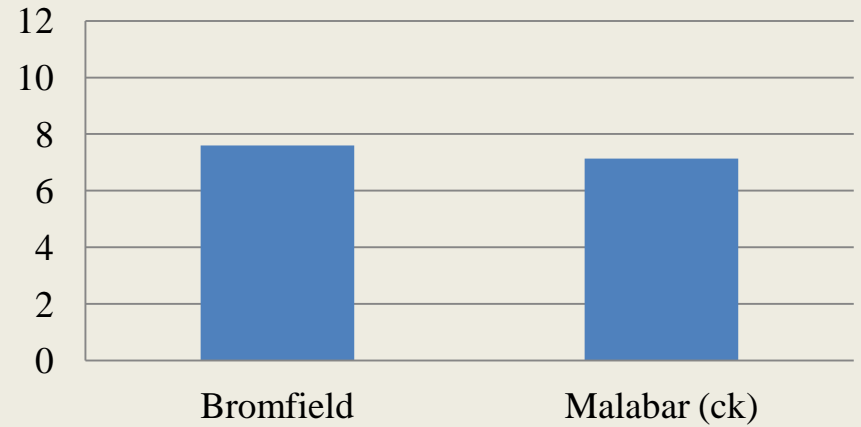


Set 3: The Ohio State University

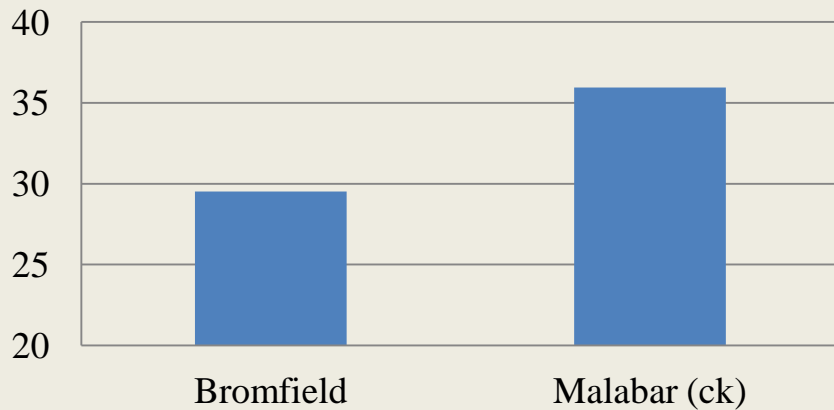
SKCS Hardness



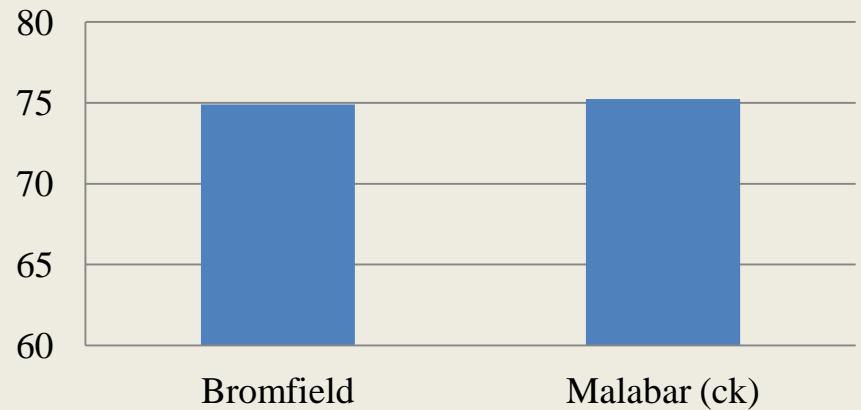
Flour Protein



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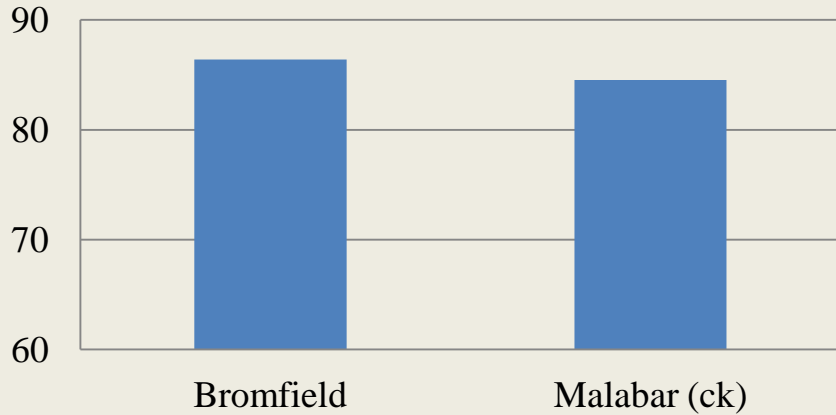


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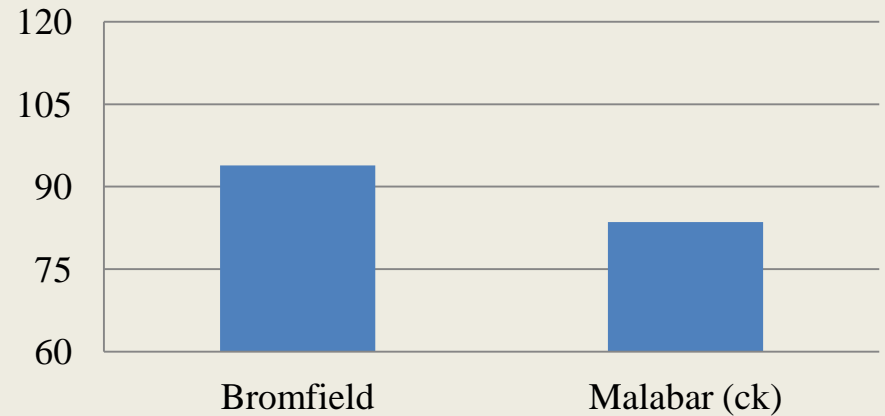


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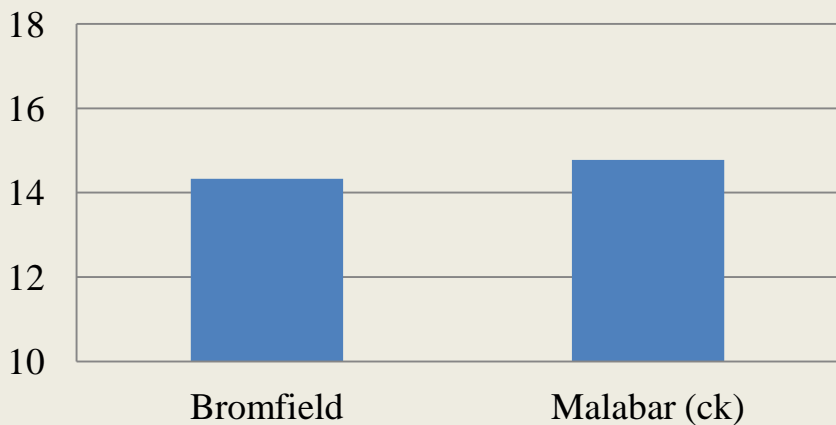
SRC Sodium Carbonate



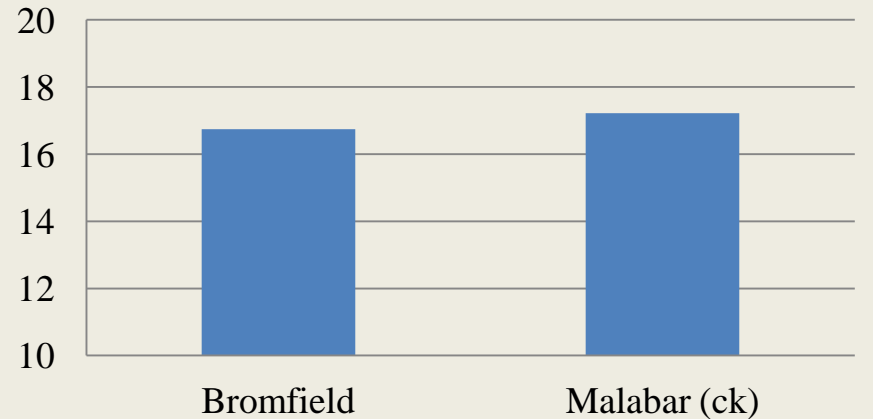
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Wire-Cut Cookie Diameter

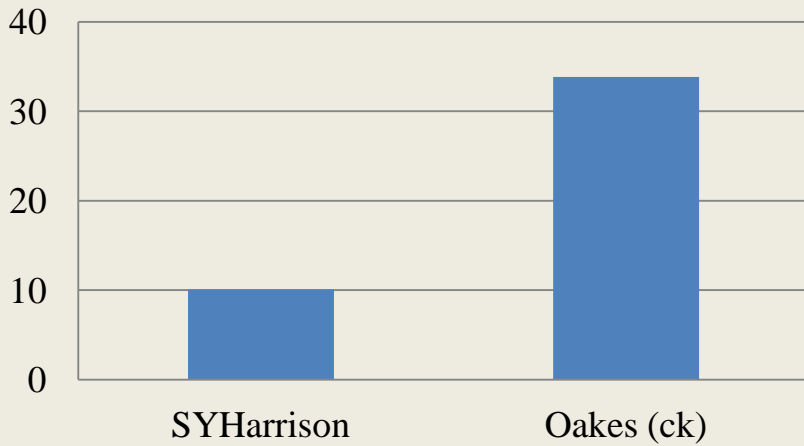


Sugar Snap Cookie Diameter

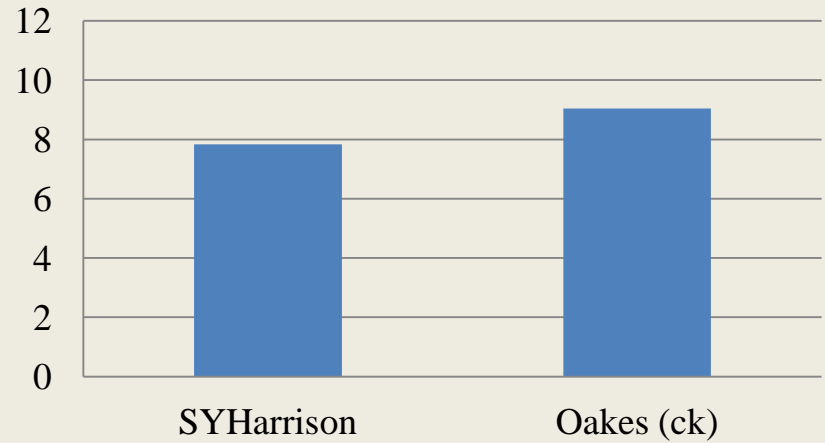


Set 4: Syngenta

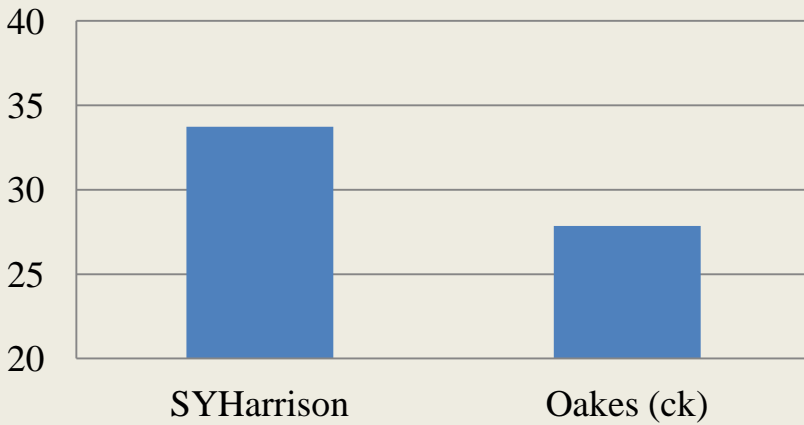
SKCS Hardness



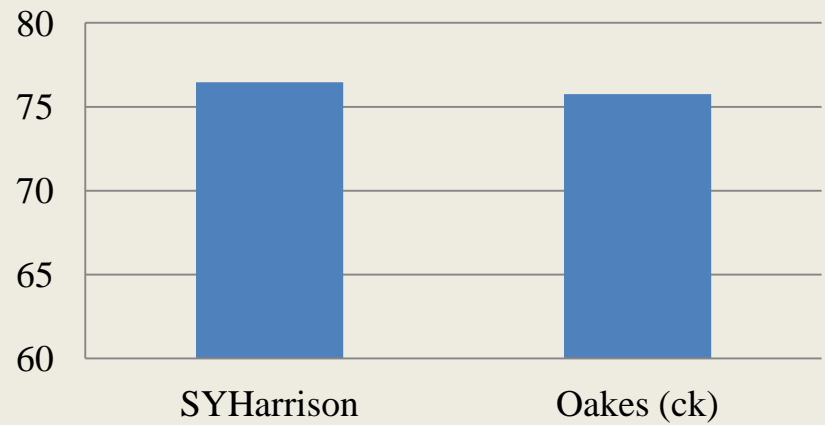
Flour Protein



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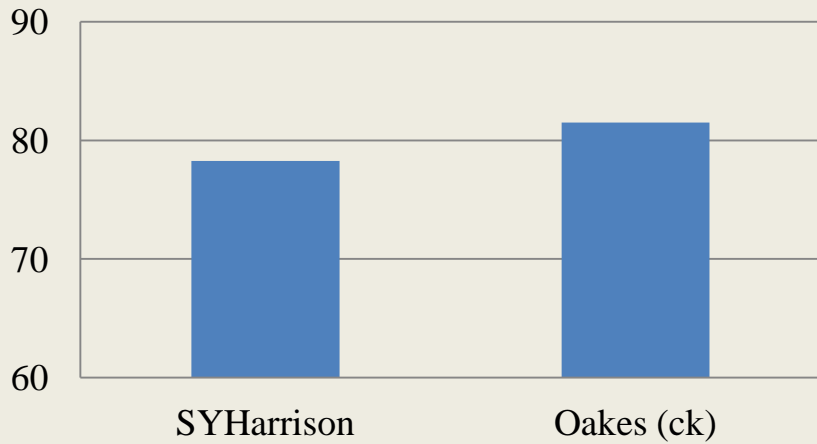


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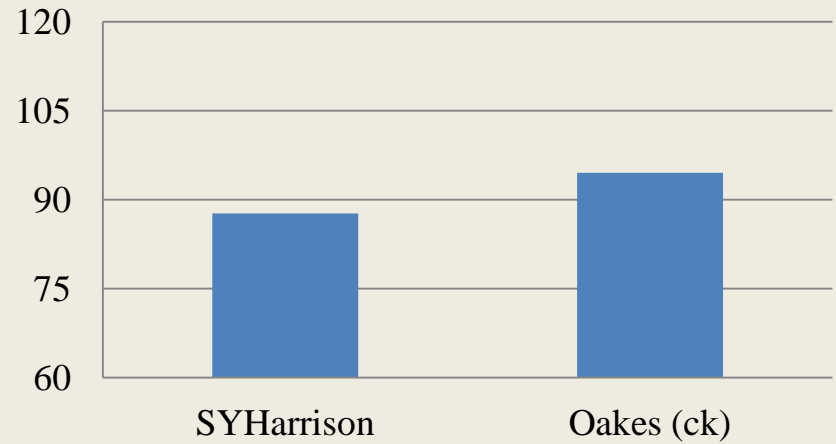


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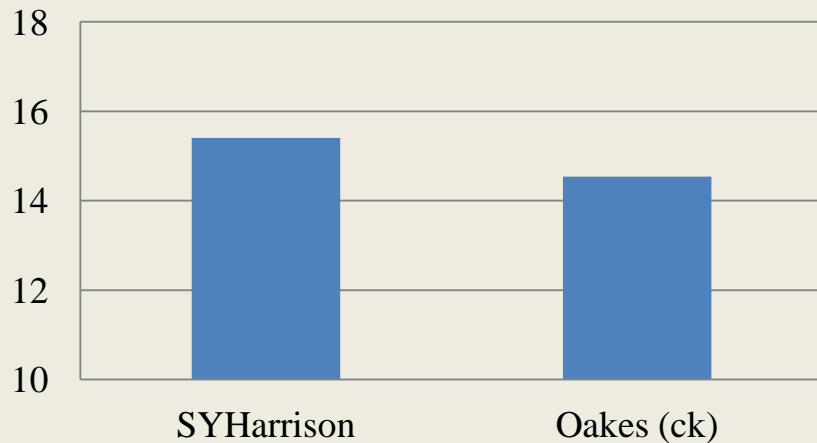
SRC Sodium Carbonate



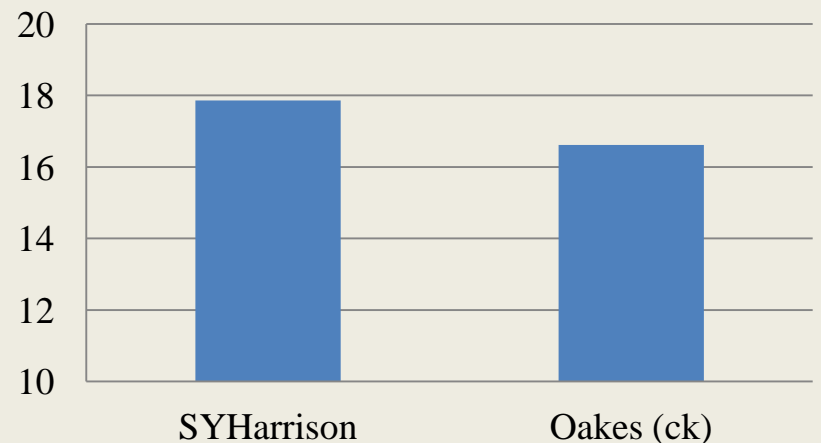
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Wire-Cut Cookie Diameter

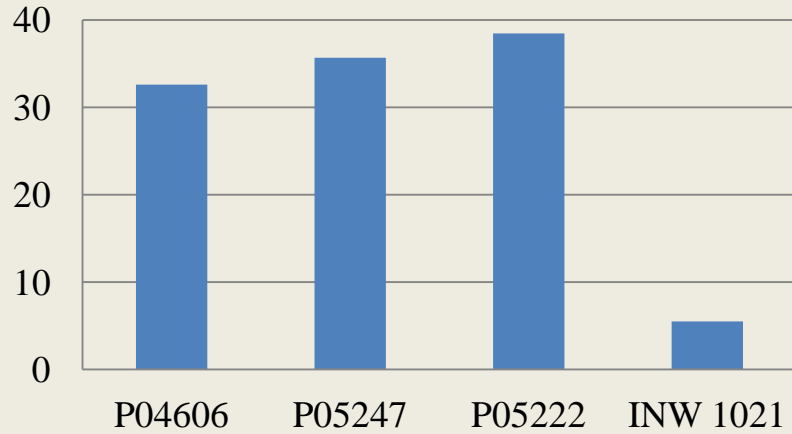


Sugar Snap Cookie Diameter

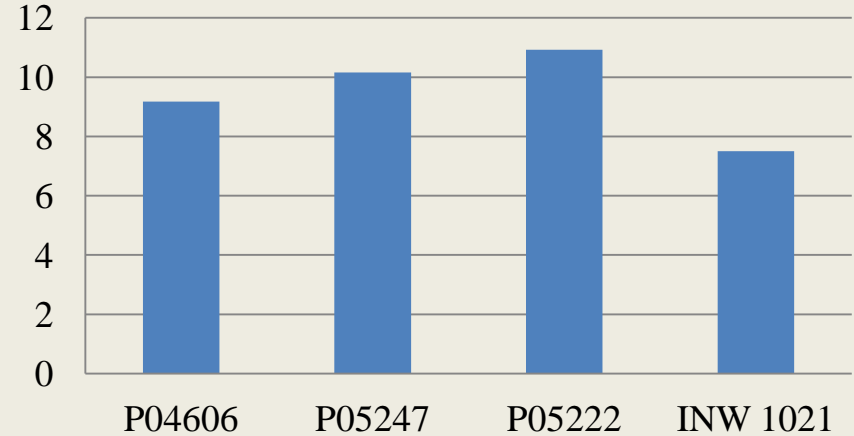


Set 5: Purdue University

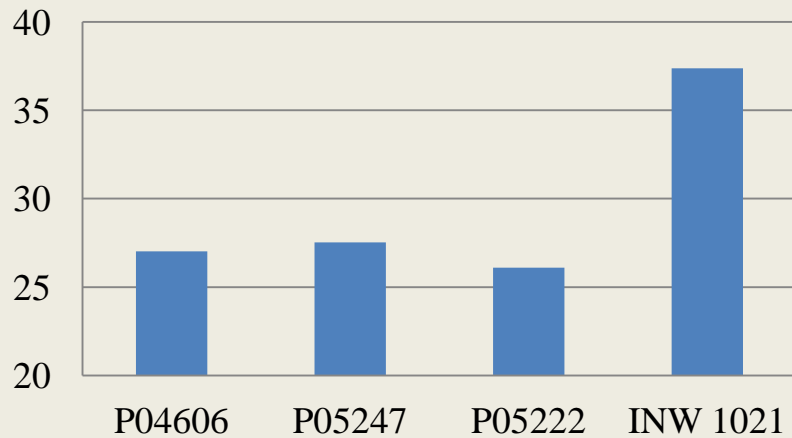
SKCS Hardness



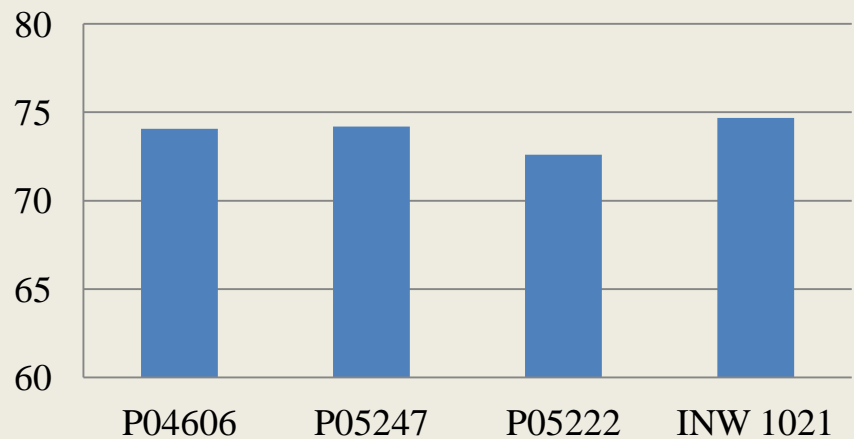
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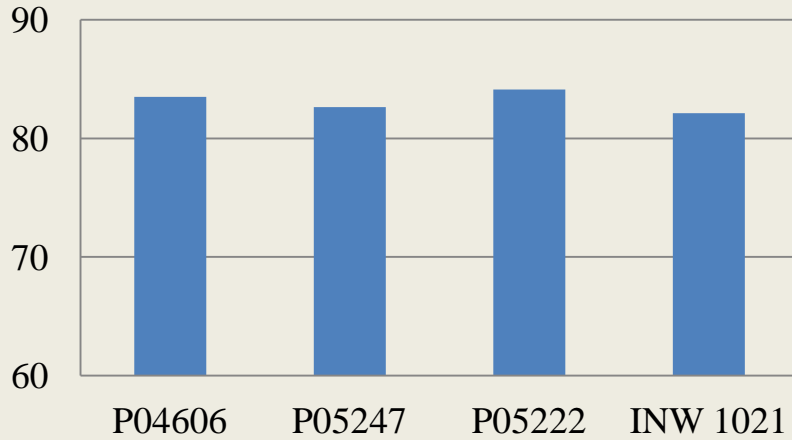


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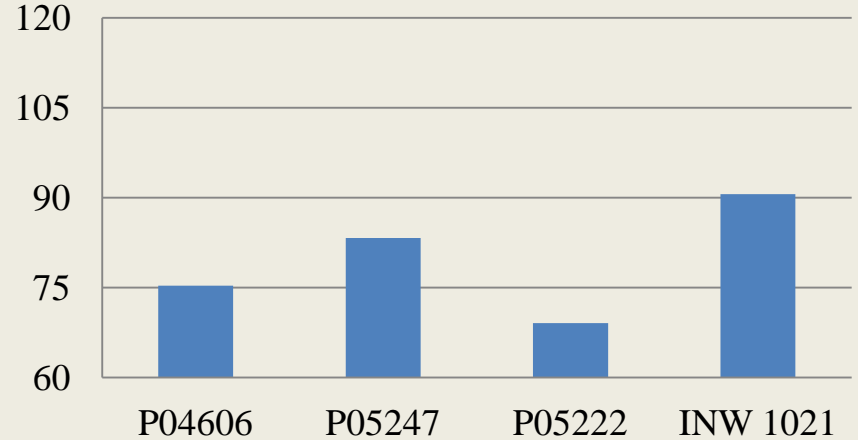


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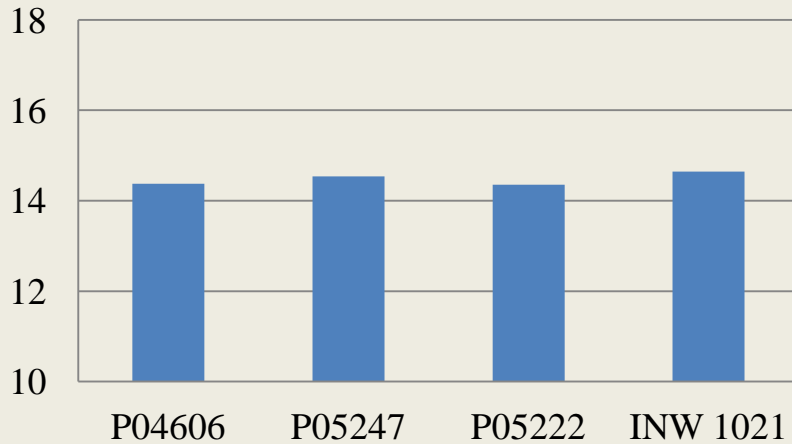
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Wire-Cut Cookie Diameter



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