

Report

August 1, 2024

UGMA Moisture Meter Performance

This document contains plots that show the performance for instruments based on FGIS's Unified Grain Moisture Algorithm (UGMA). The data were collected on FGIS's UGMA Master System for the crops listed on each plot. The differences are instrument moisture results minus USDA-FGIS air oven moisture results.

The plots show data for the spring/summer and fall harvest grain groups. The specific grain types included in each grain group are listed below the grain group title of each plot. The "mean" value is the average difference between the UGMA results and the air oven results for all samples on the plot. The Standard Deviation of Differences (SDD) value is a measure of the variability of differences between the UGMA results and the air oven results. Approximately two thirds of UGMA results were within +/- the listed SDD value for that grain group.

The y-axis range for all plots is +/- 2 % moisture difference, and the x-axis is the % moisture (air oven value).

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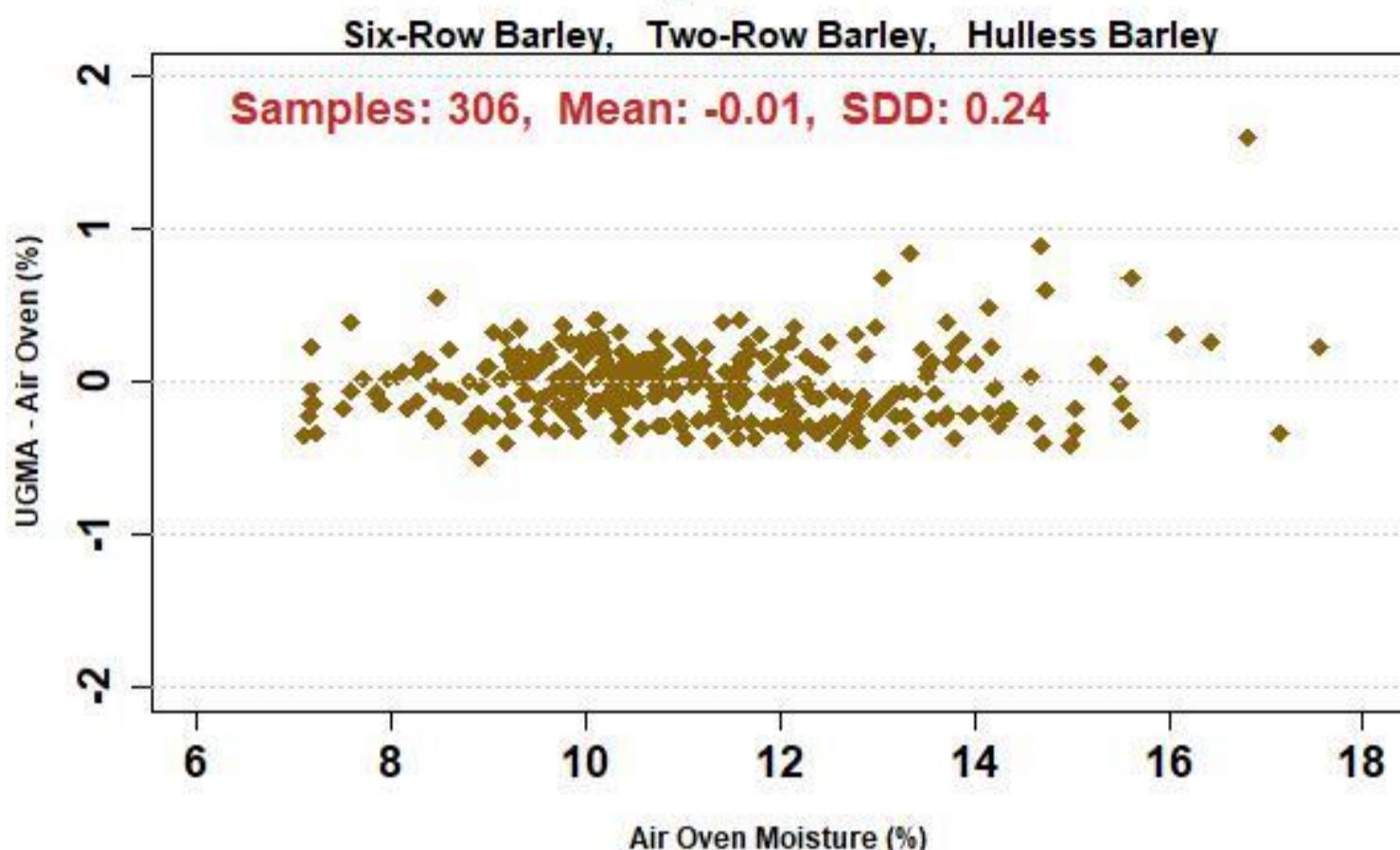
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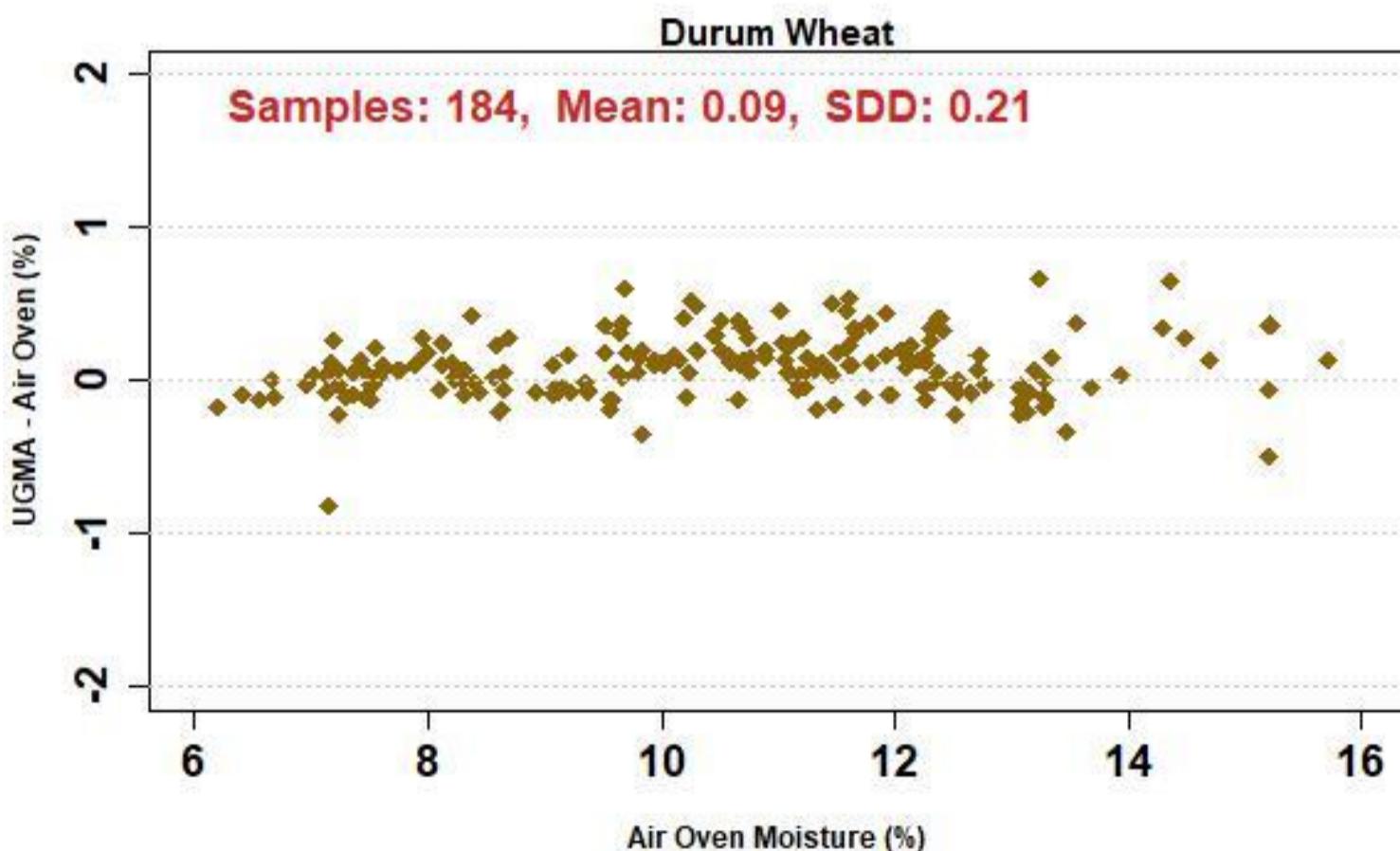
1. Barley Grain Group

Barley: 2012 - 2023



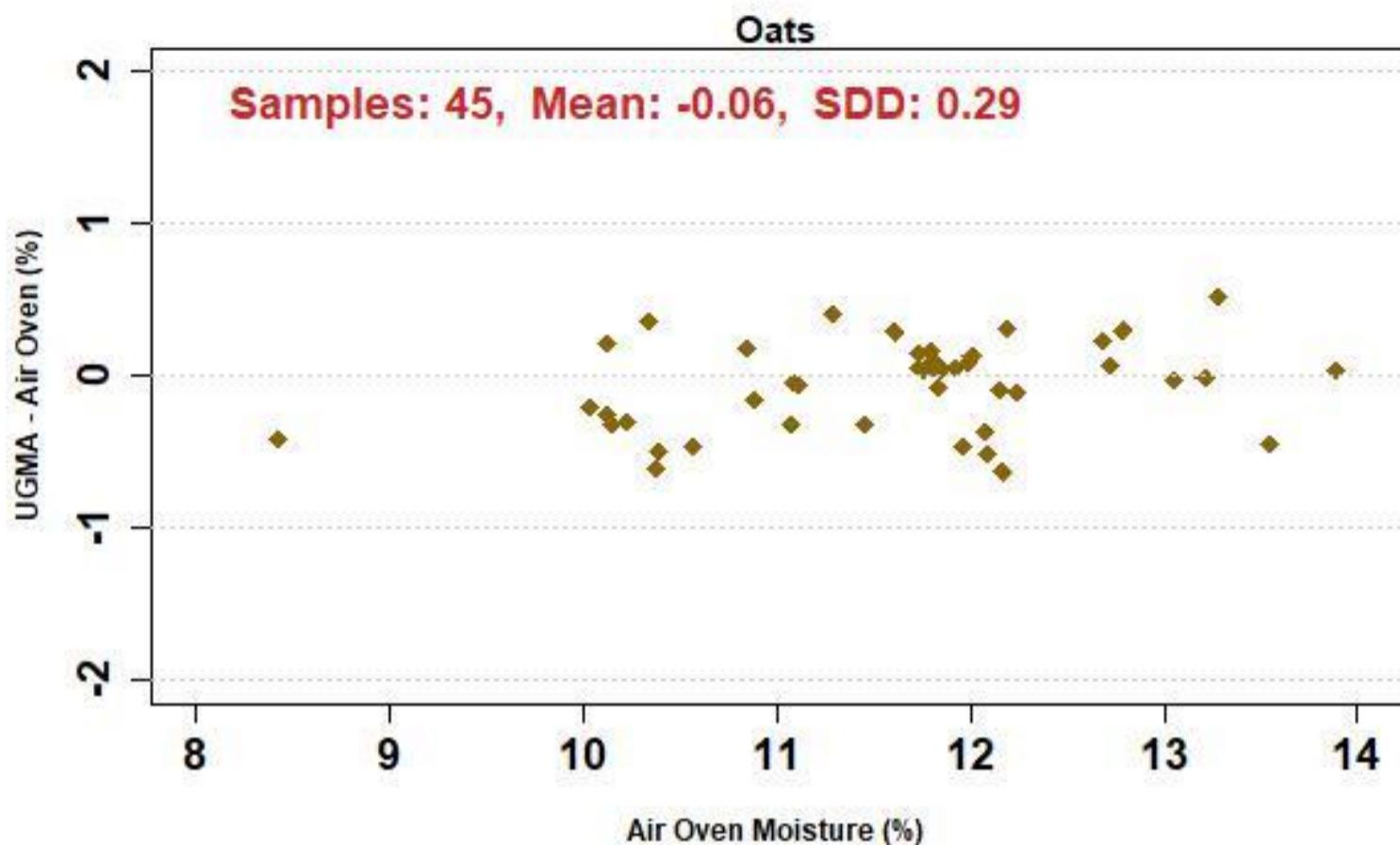
2. Durum Grain Group

Durum: 2019 - 2023



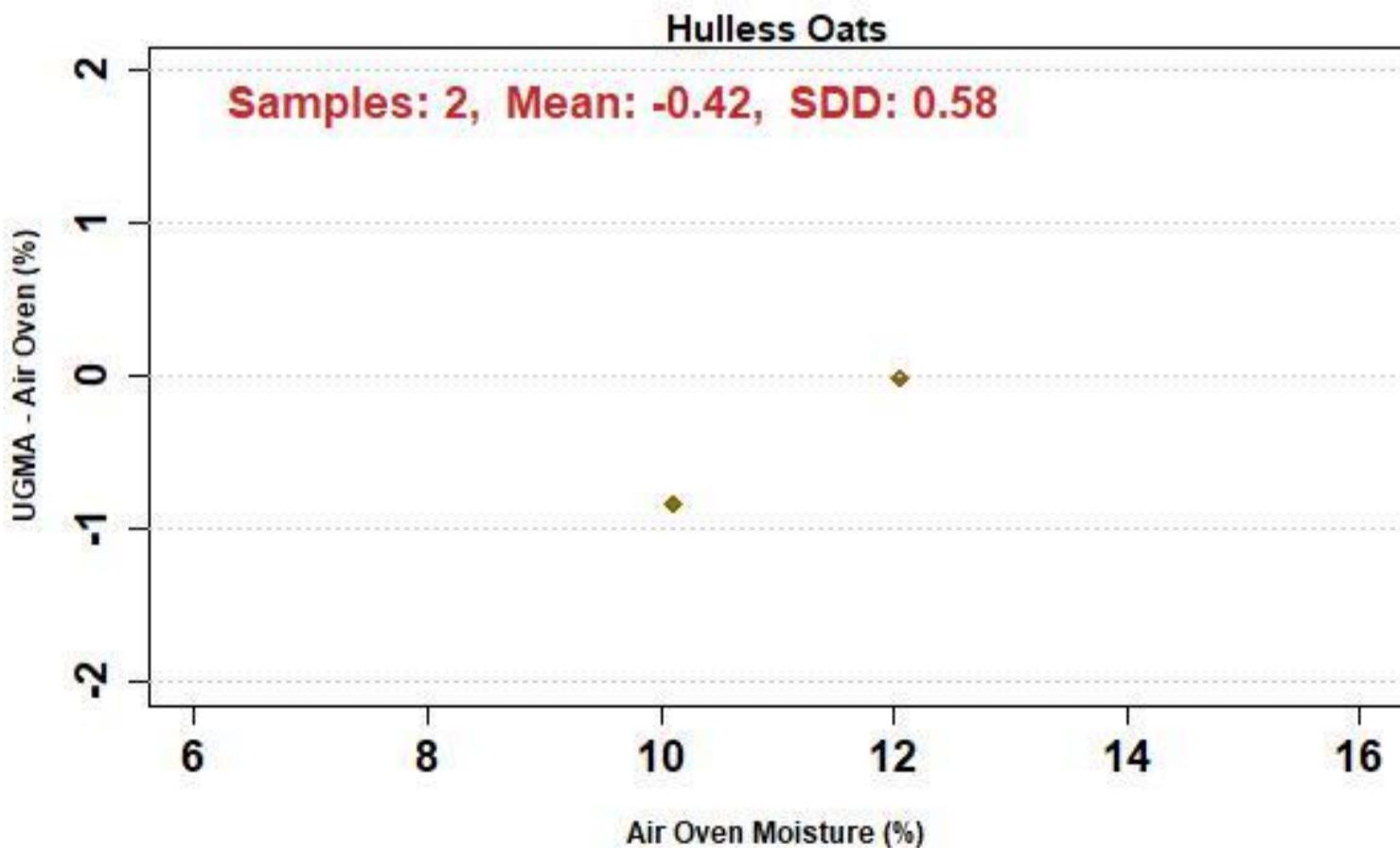
3. Oats Grain Group

Oats: 2019 - 2023



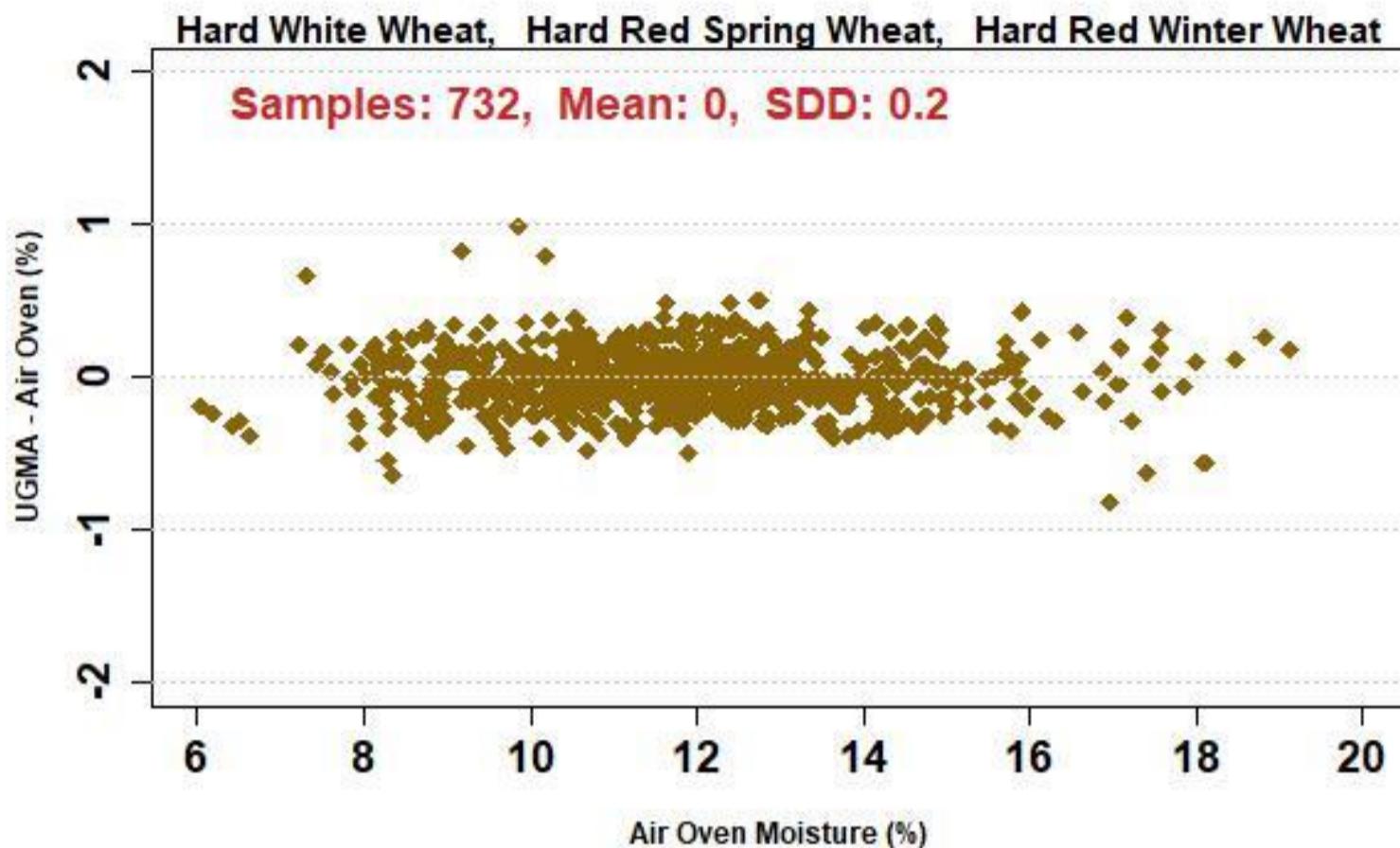
4. Hulless Oats Grain Group

Hulless Oats: 2019



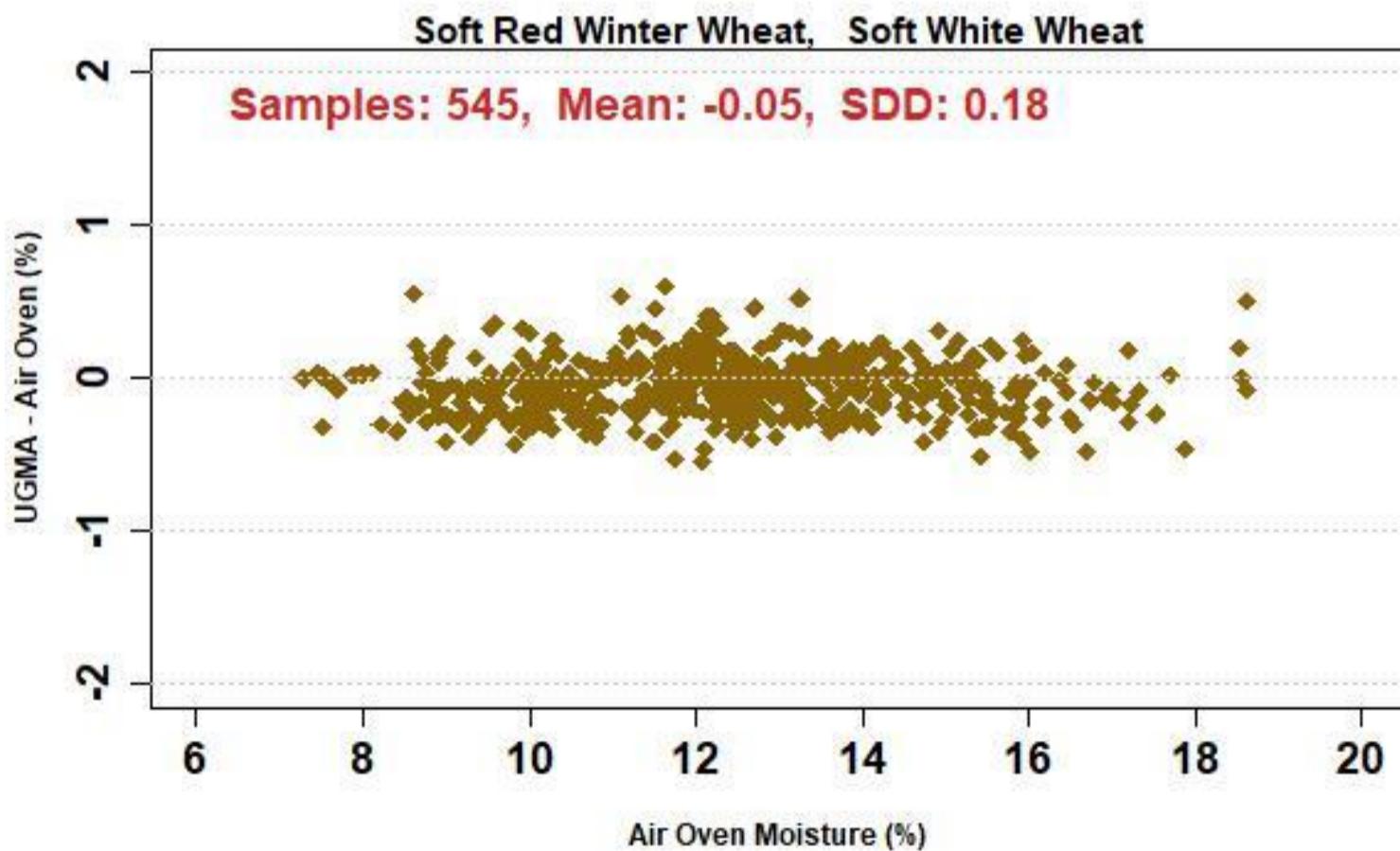
5. Hard wheat Grain Group

Hard Wheat: 2019 - 2023



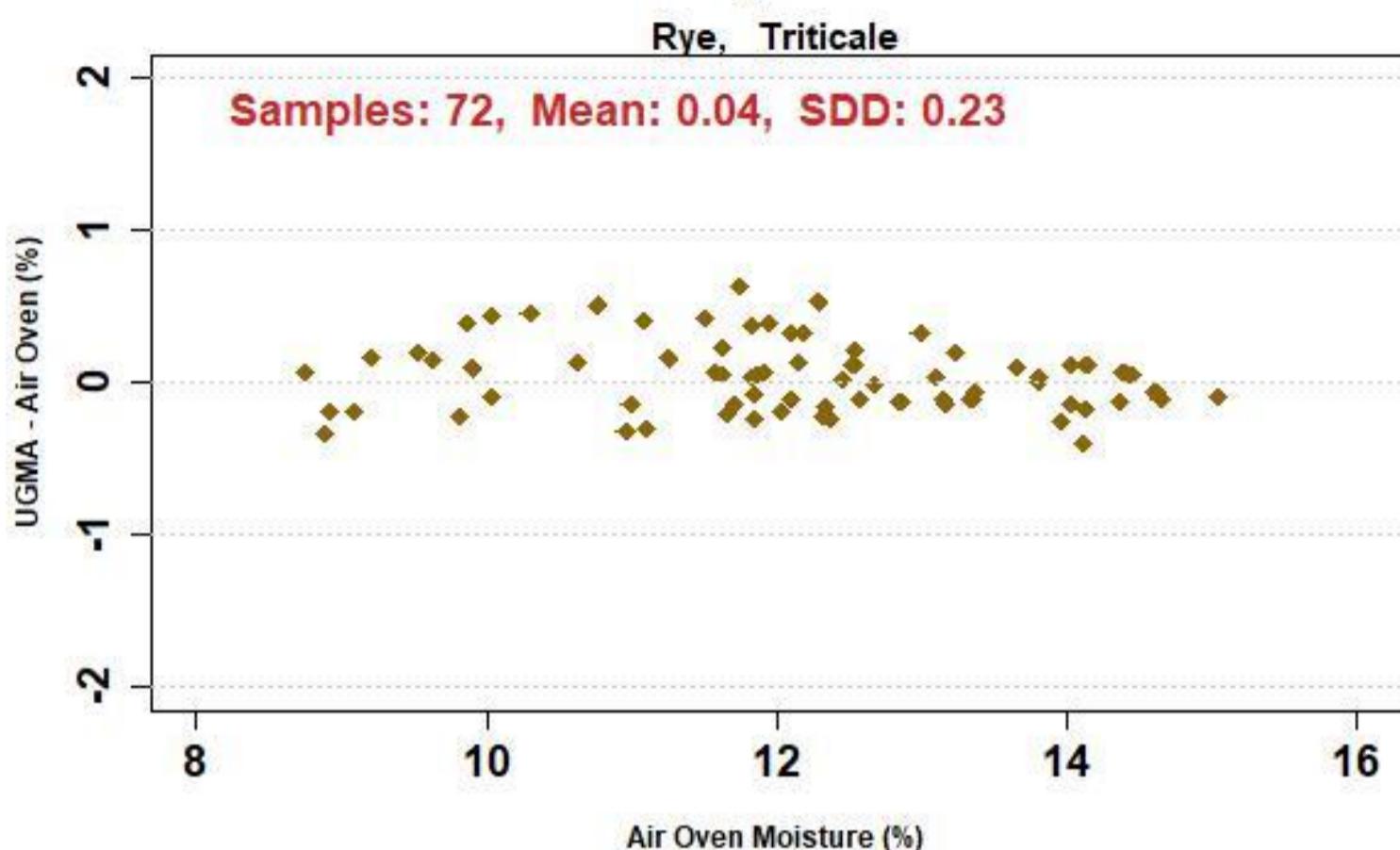
6. Soft Wheat Grain Group

Soft Wheat: 2019 - 2023



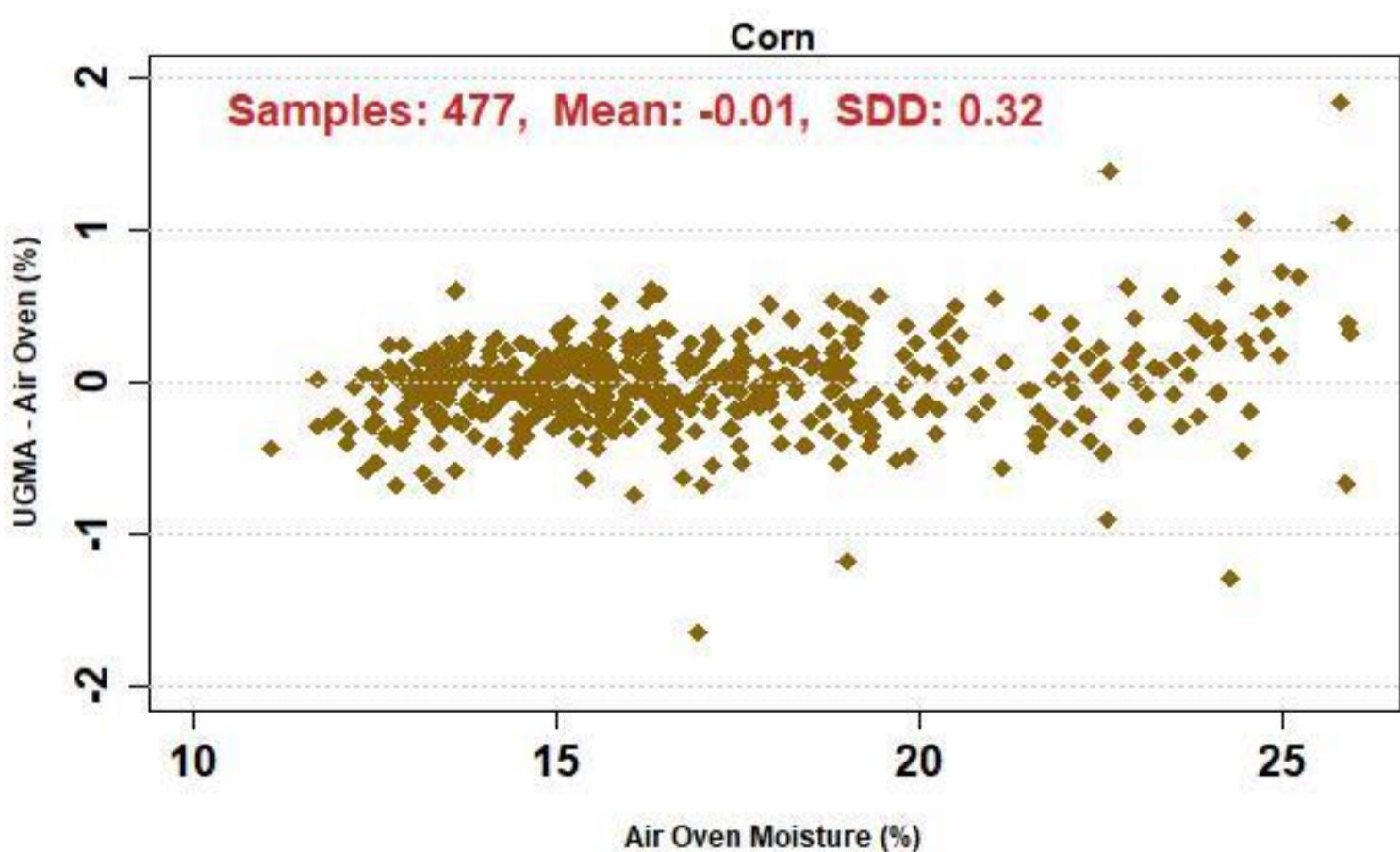
7. Triticale & Rye Grain Group

Triticale & Rye: 2011 - 2023



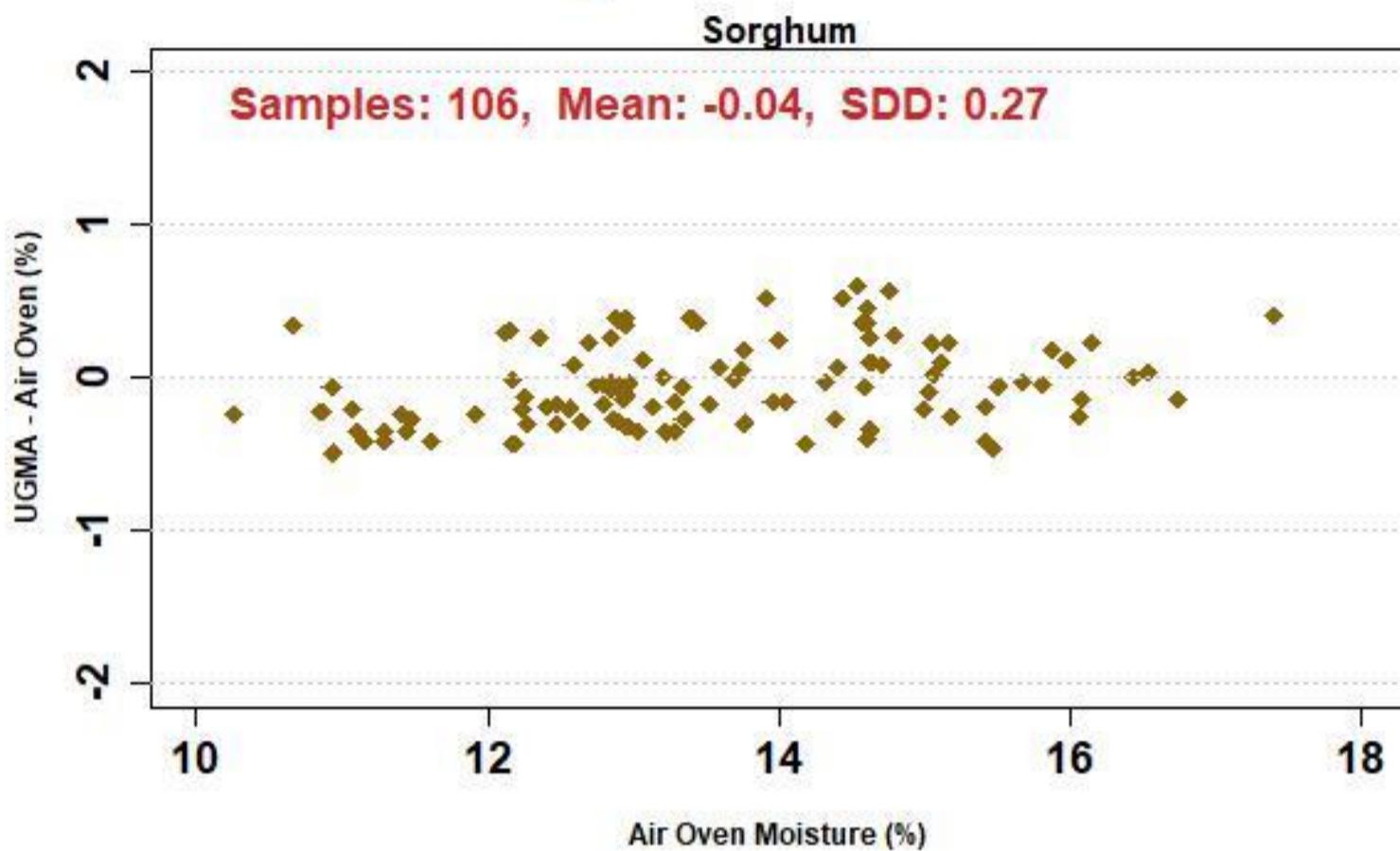
8. Corn Grain Group

Corn: 2019 - 2023



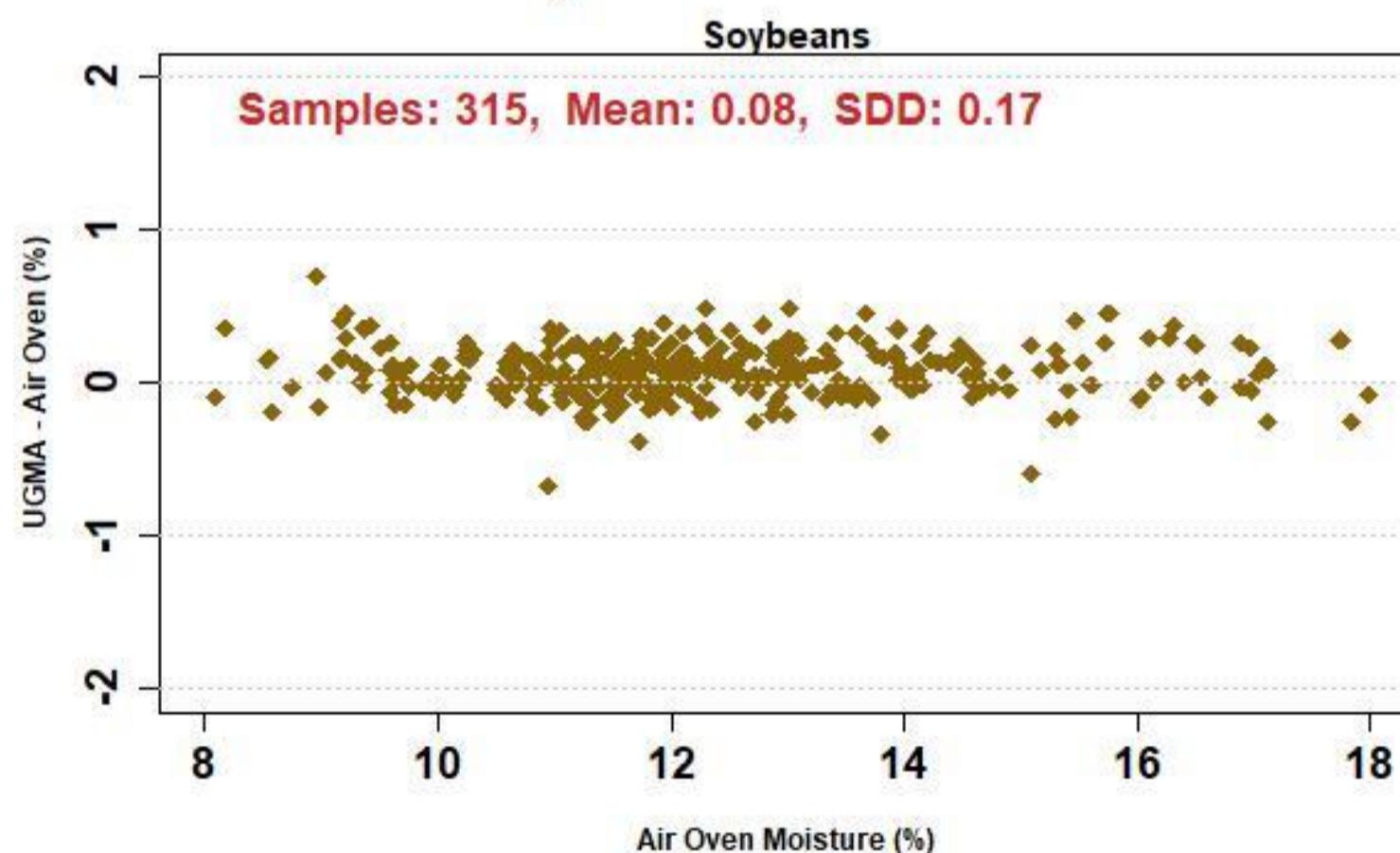
9. Sorghum Grain Group

Sorghum: 2019 - 2023



10. Soybean Grain Group

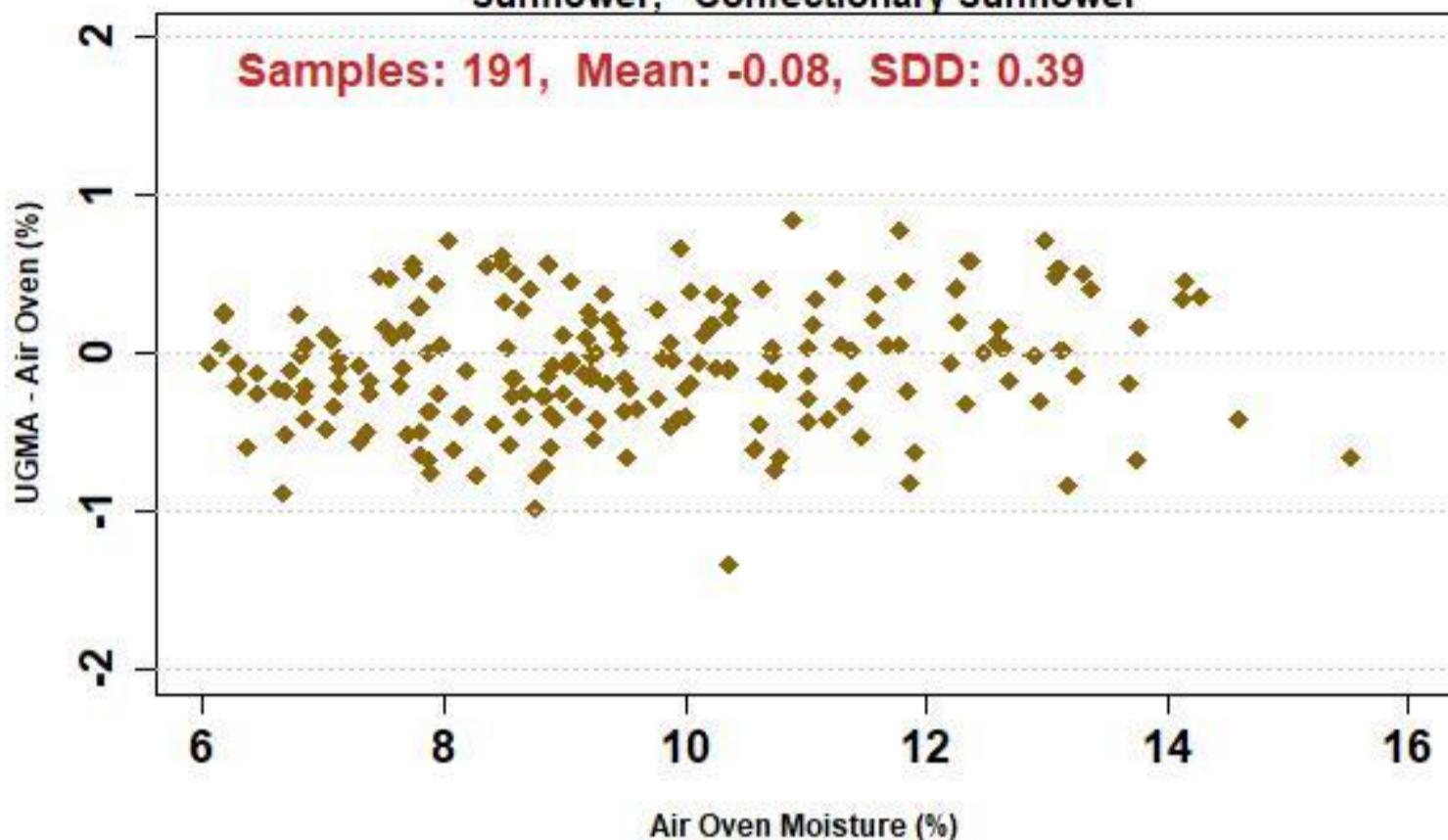
Soybeans: 2019 - 2023



11. Sunflower Grain Group

Sunflower: 2015 - 2023

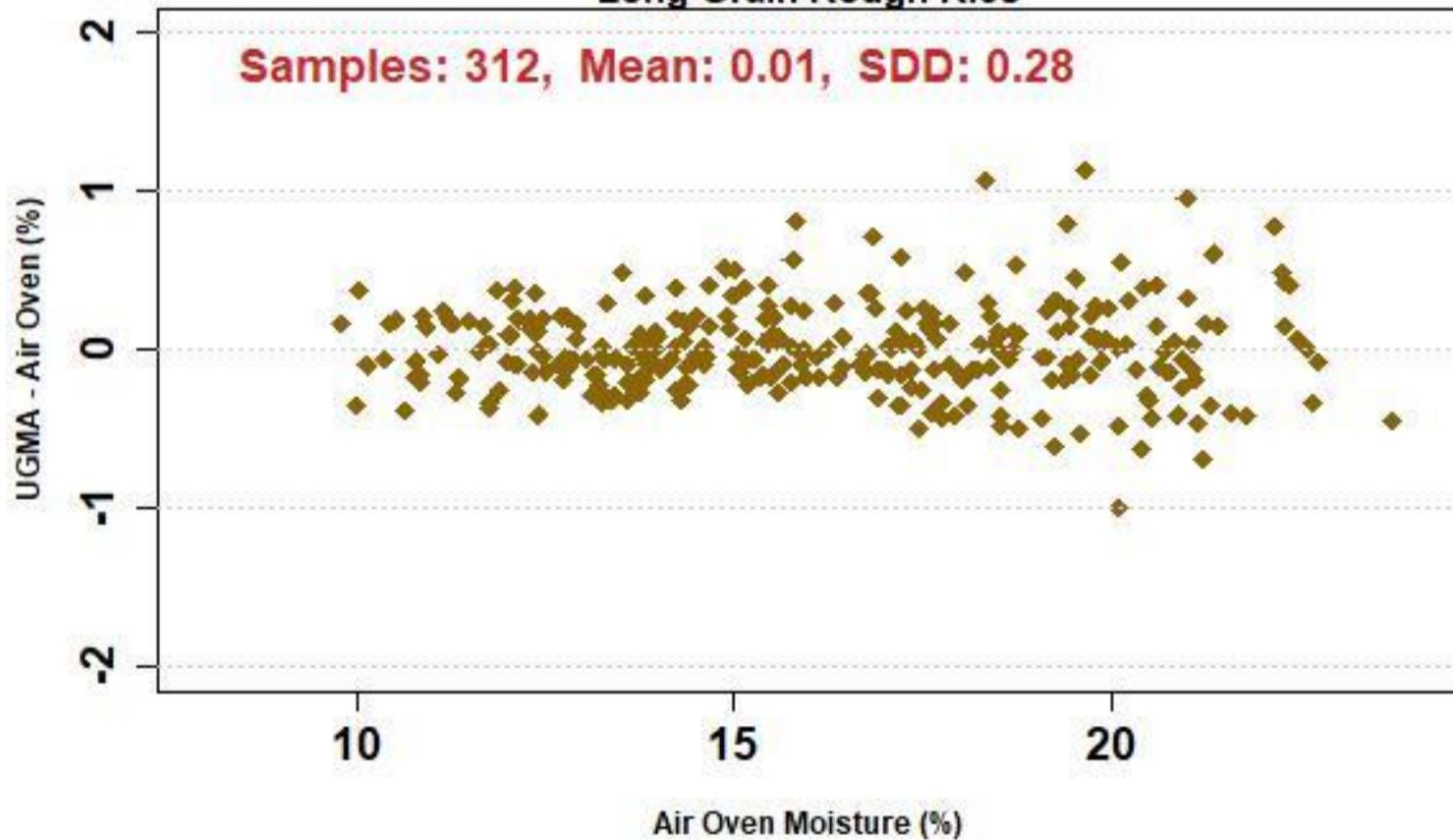
Sunflower, Confectionary Sunflower



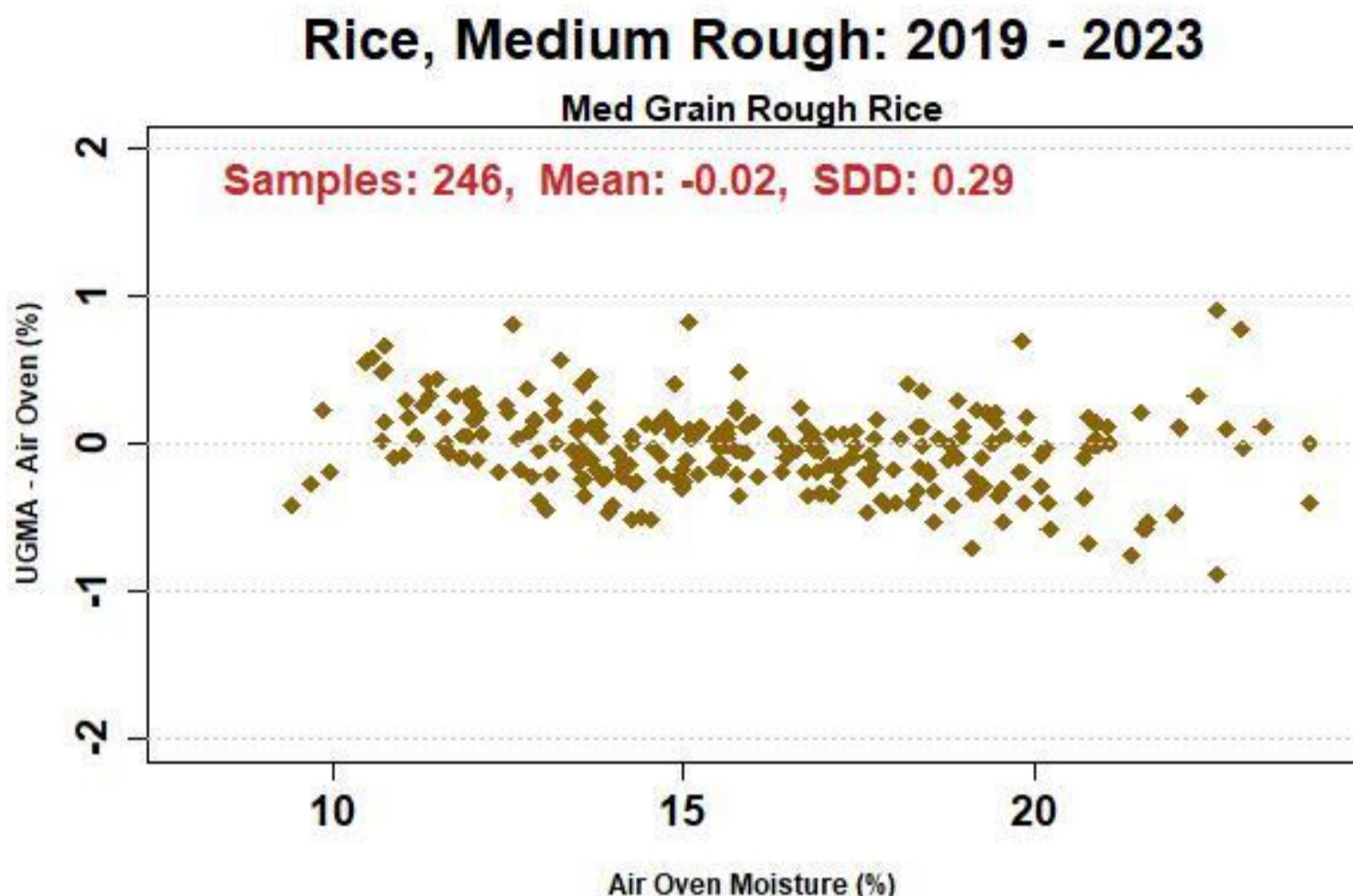
12. Long Grain Rough Rice Group

Rice, Long Rough: 2019 - 2023

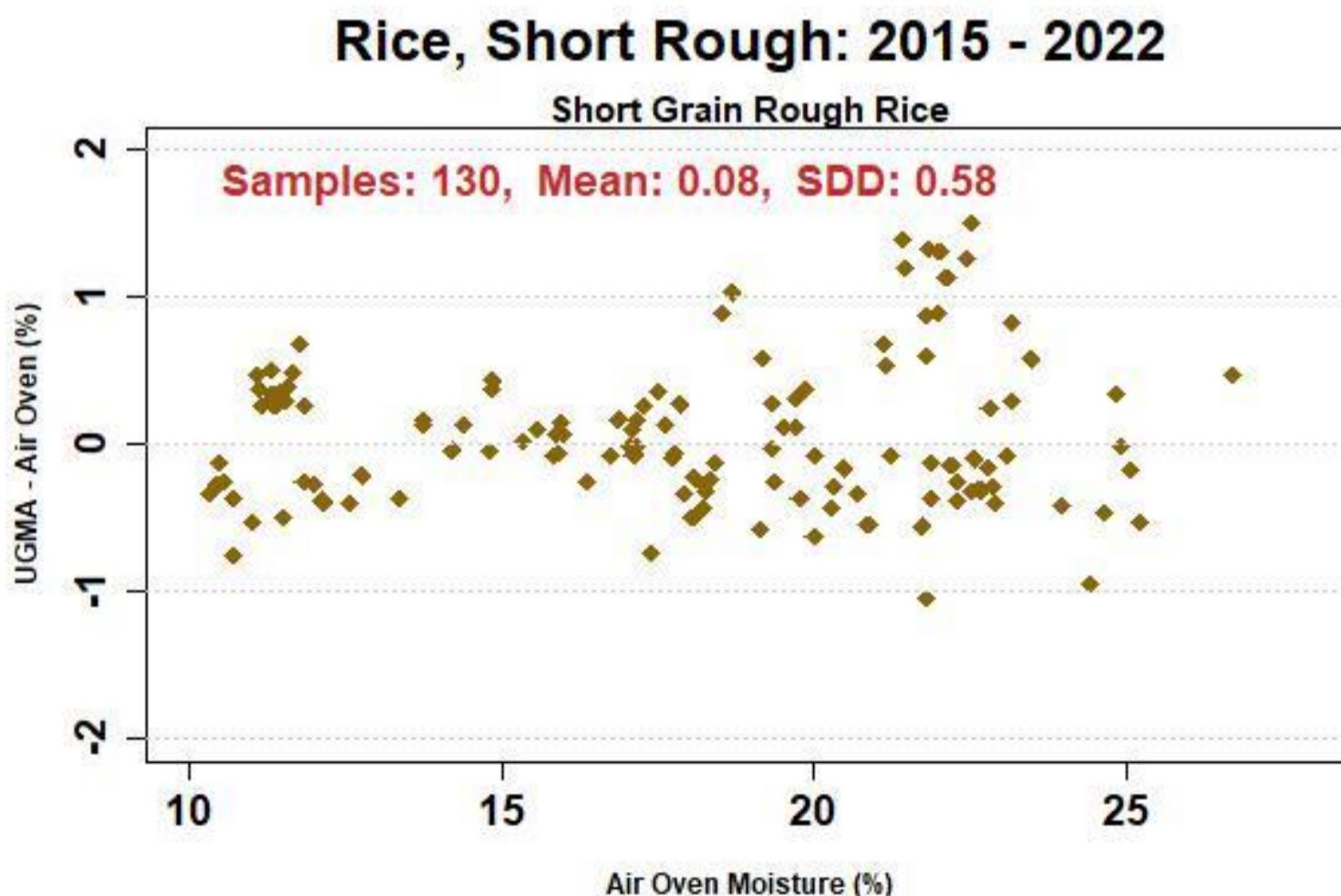
Long Grain Rough Rice



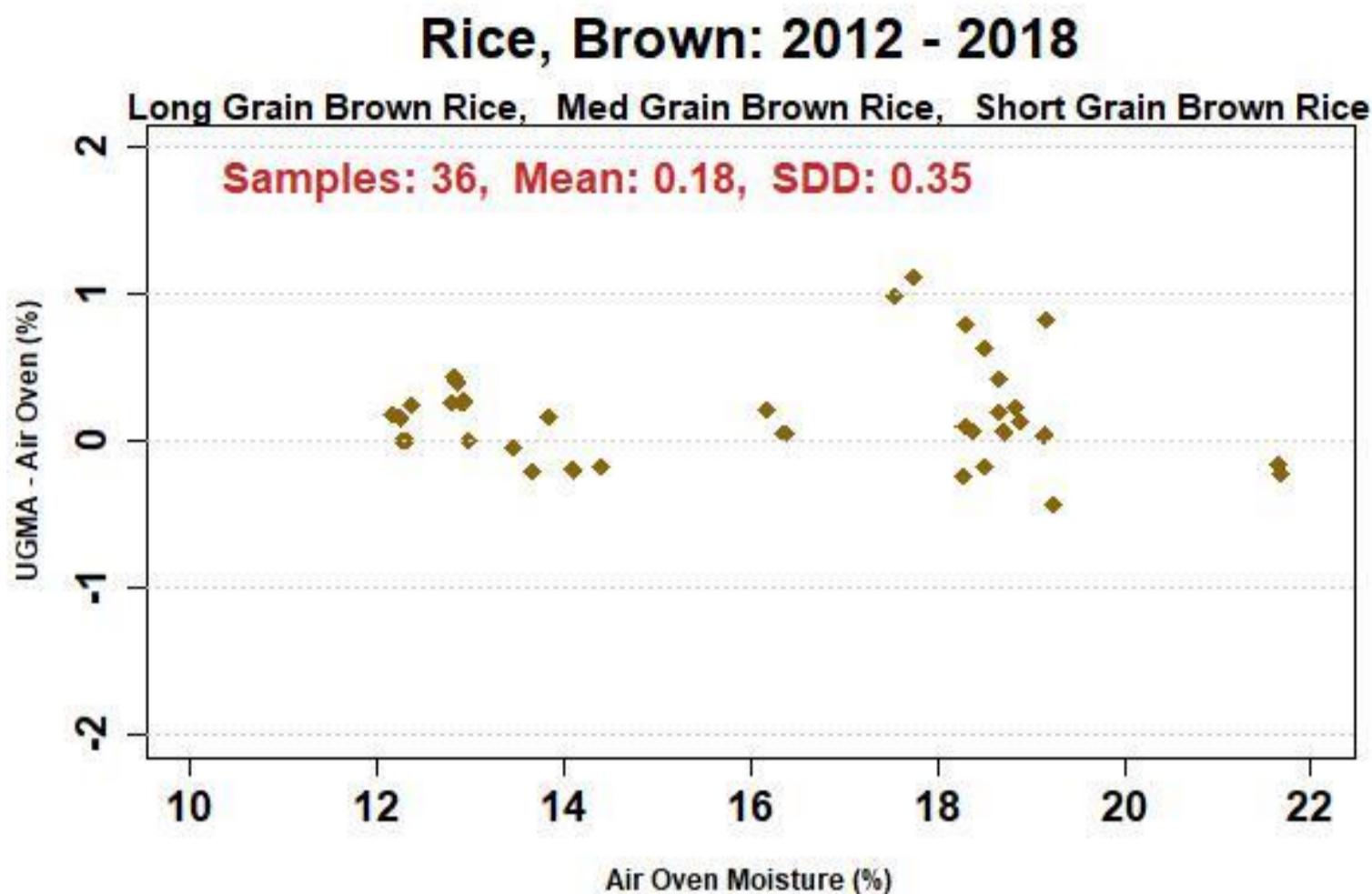
13. Medium Grain Rough Rice Group



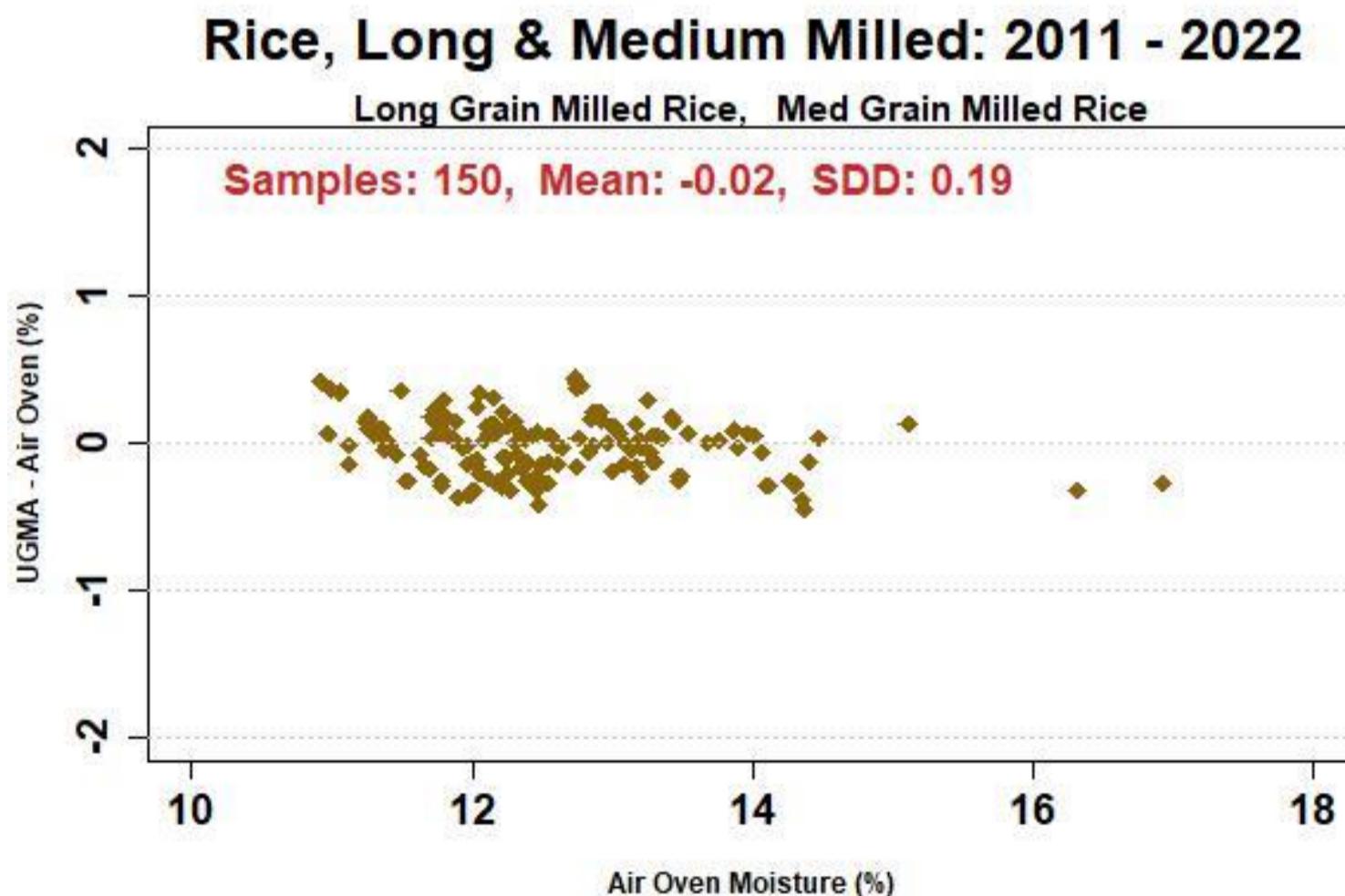
14. Short Grain Rough Rice Group



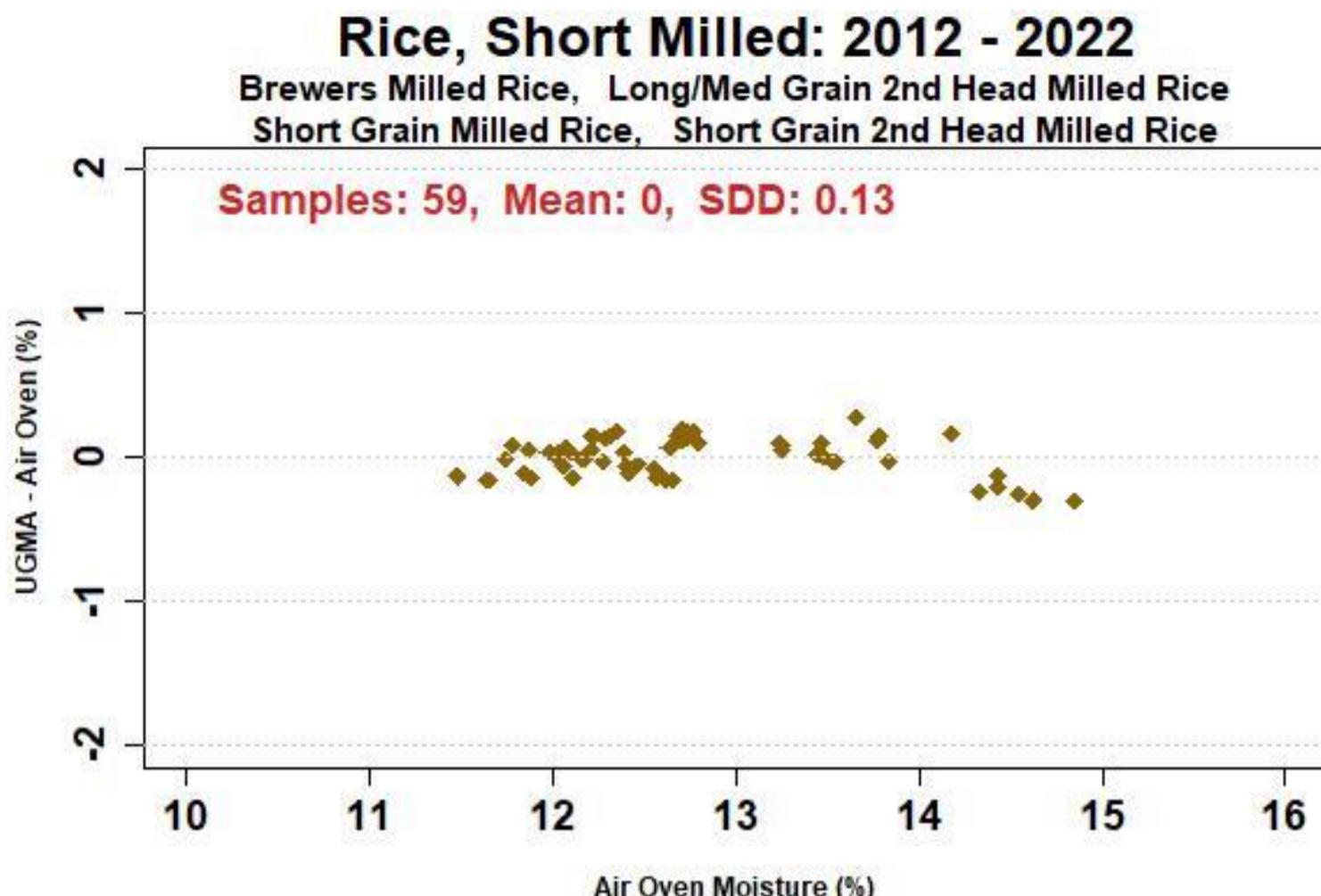
15. Brown Rice Group



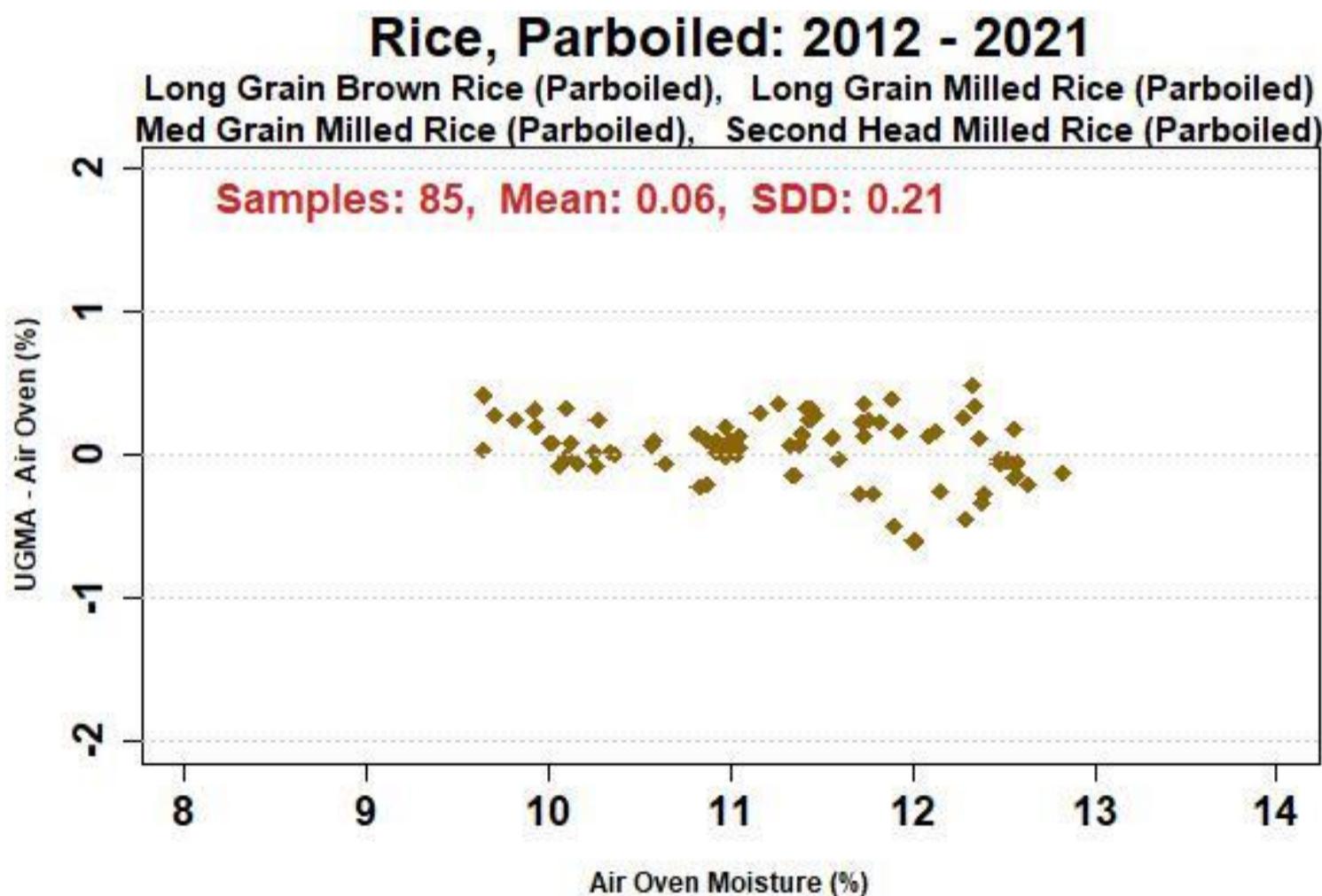
16. Long & Medium Milled Rice Group



17. Short Grain Milled Rice Group

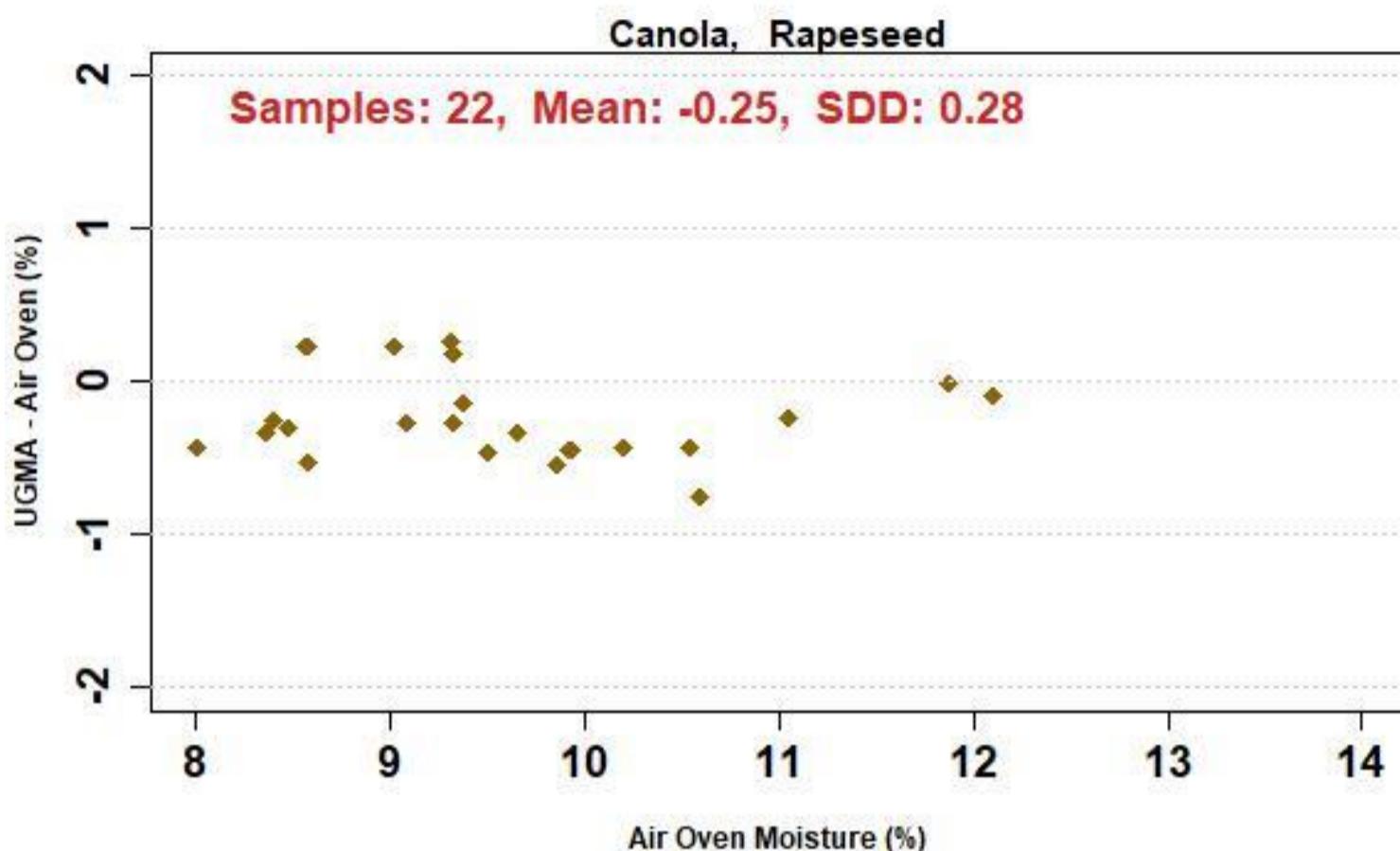


18. Parboiled Rice Group



19. Canola Grain Group

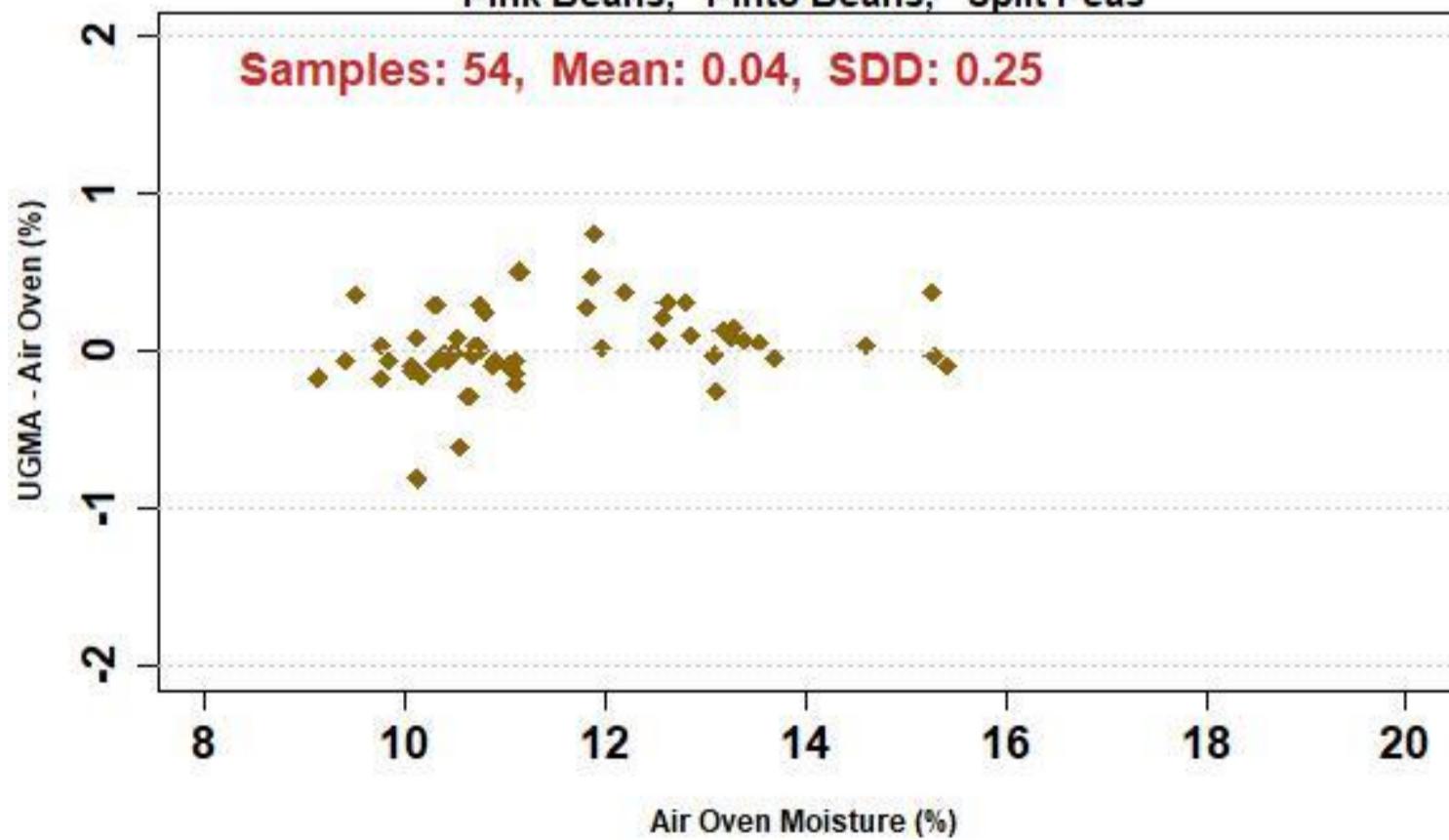
Canola: 2014 - 2018



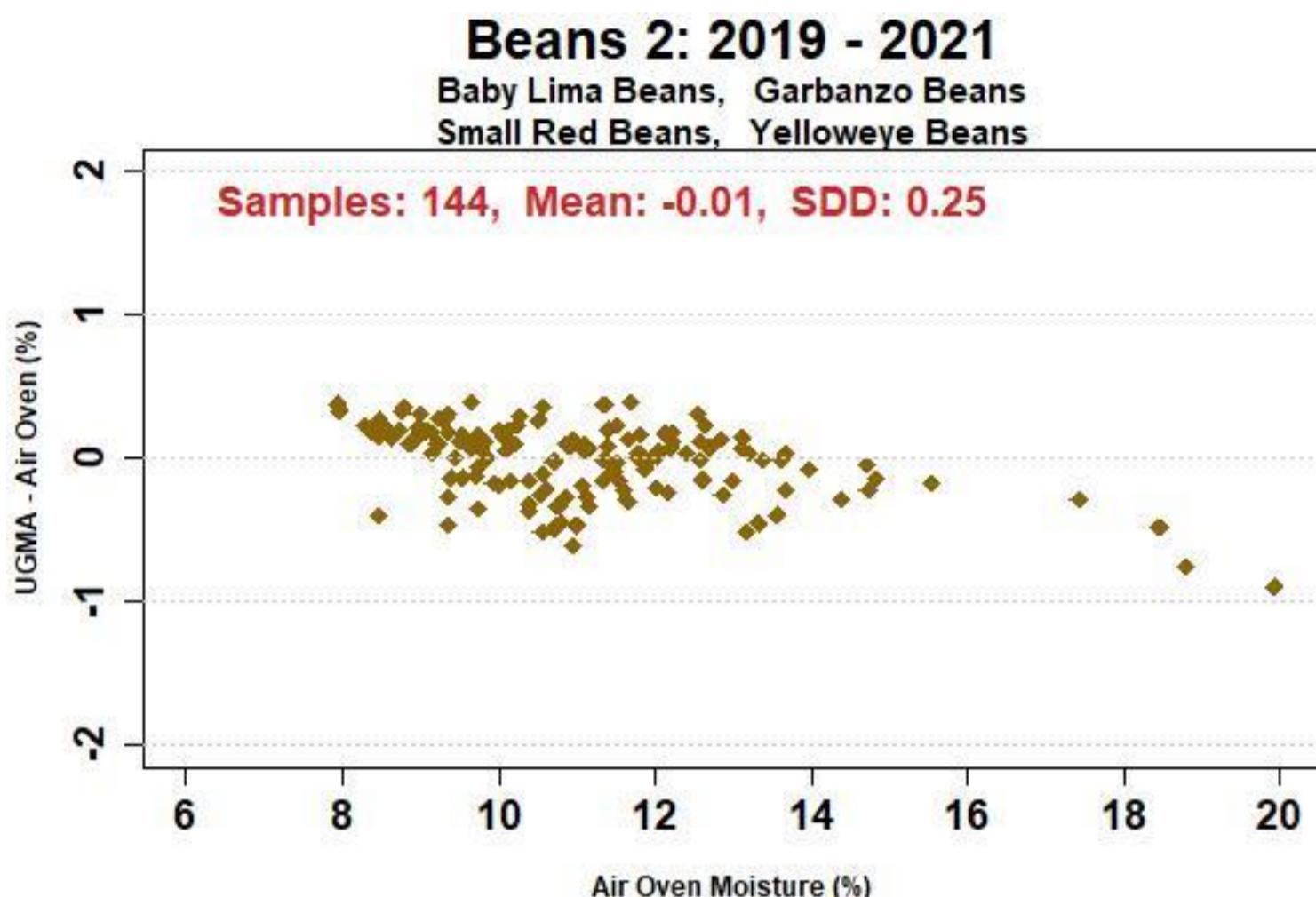
20. Beans 1 Grain Group

Beans 1: 2014 - 2021

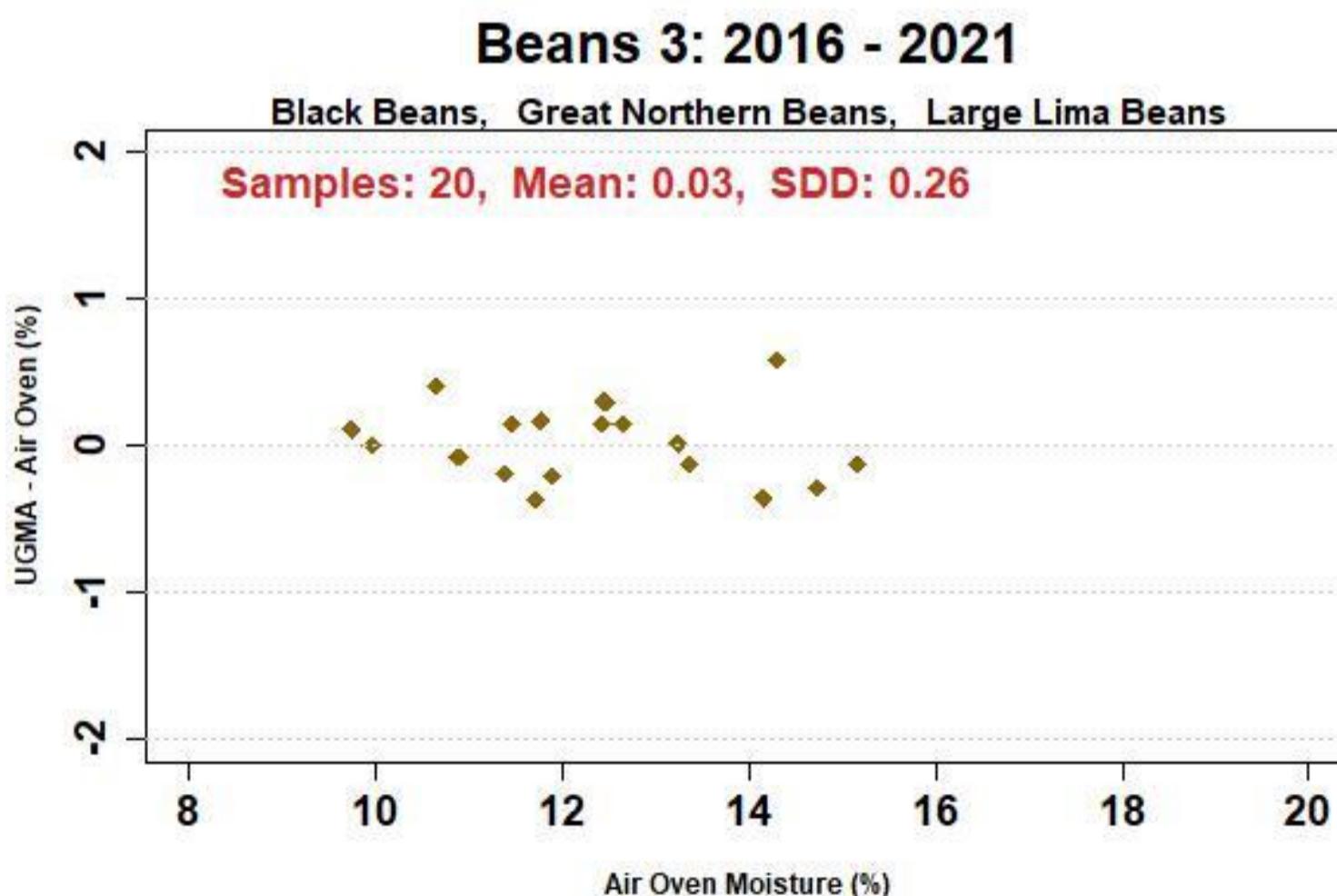
Blackeye Beans, Cranberry Beans
Pink Beans, Pinto Beans, Split Peas



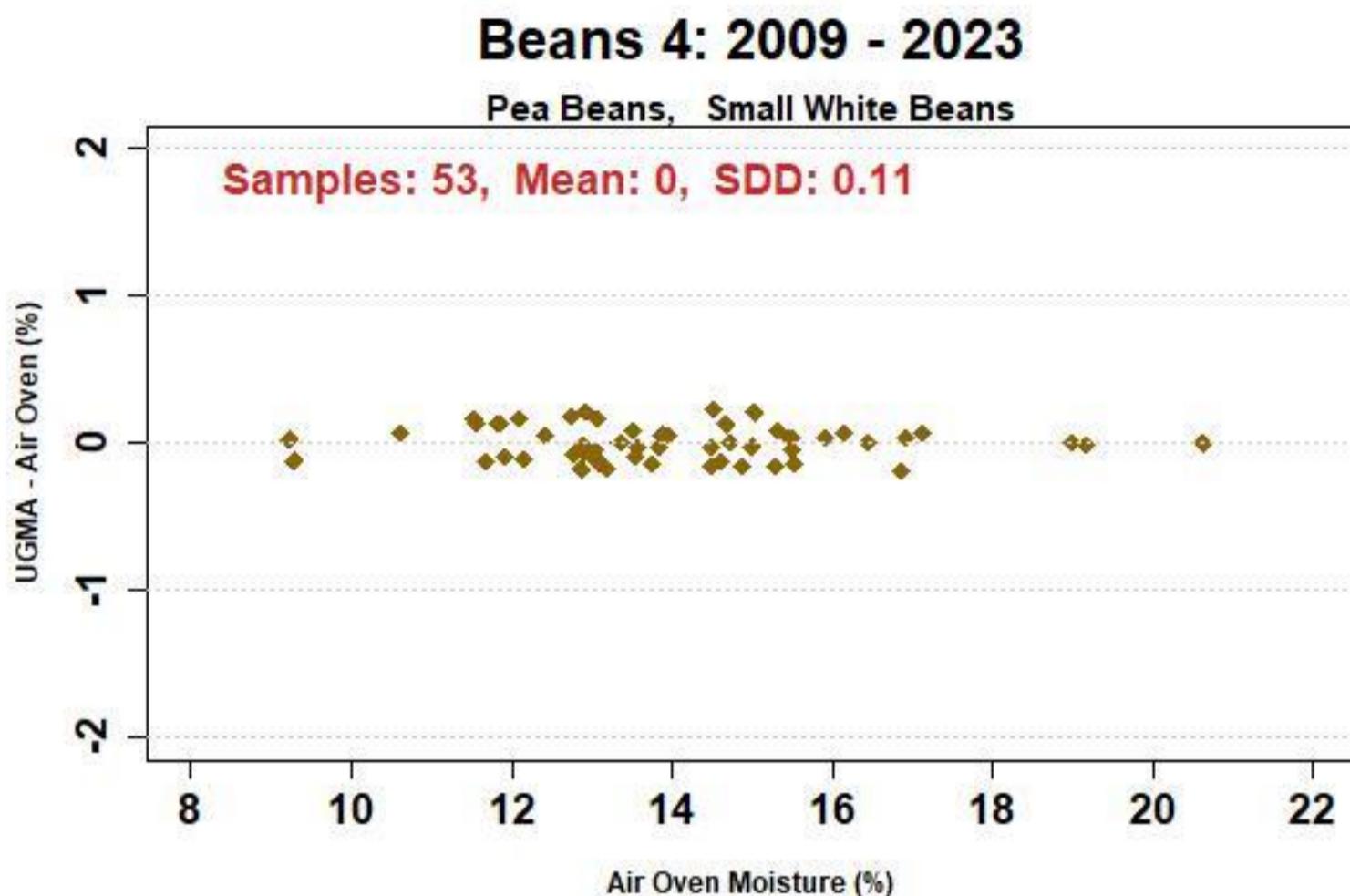
21. Beans 2 Grain Group



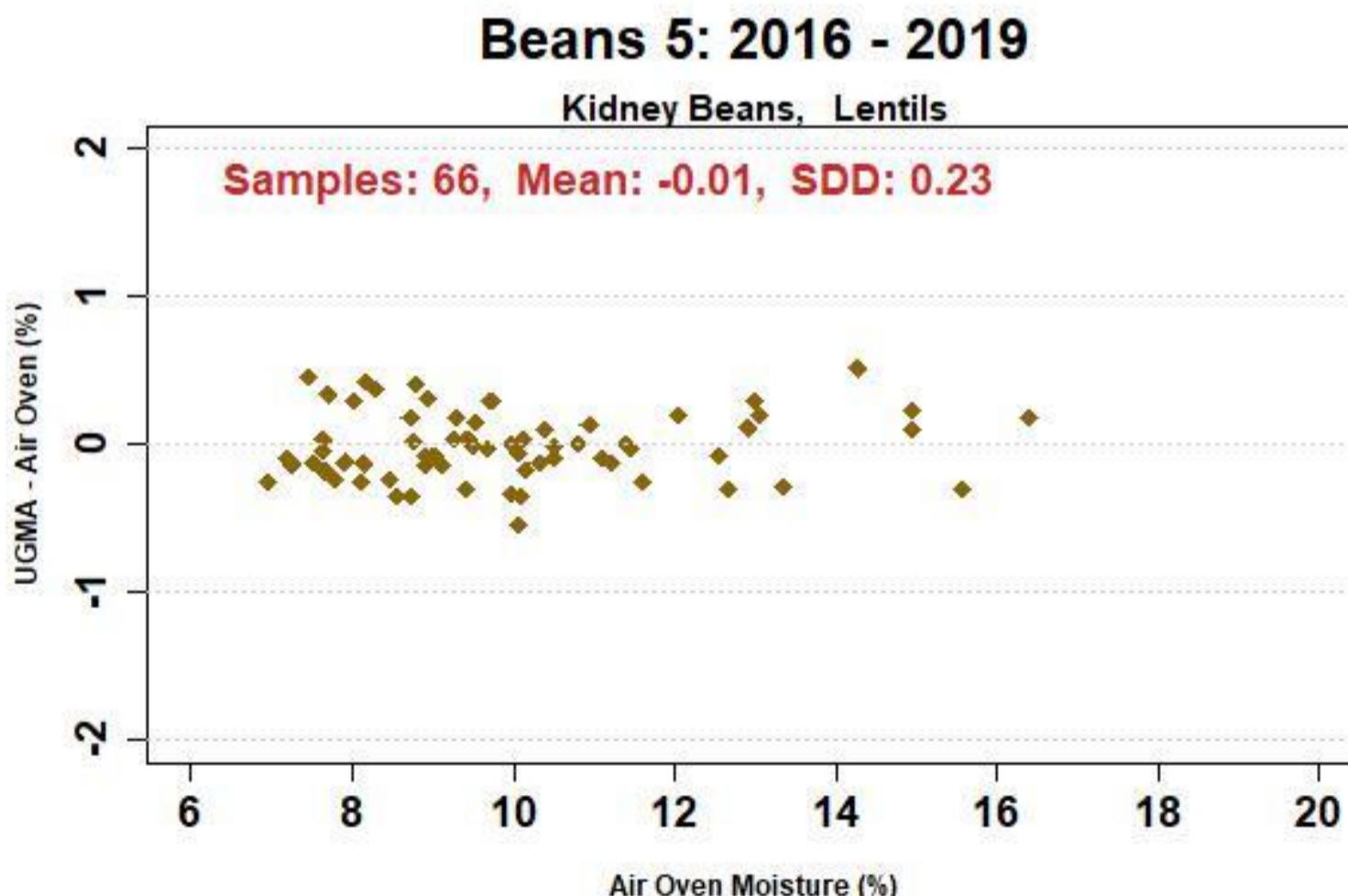
22. Beans 3 Grain Group



23. Beans 4 Grain Group



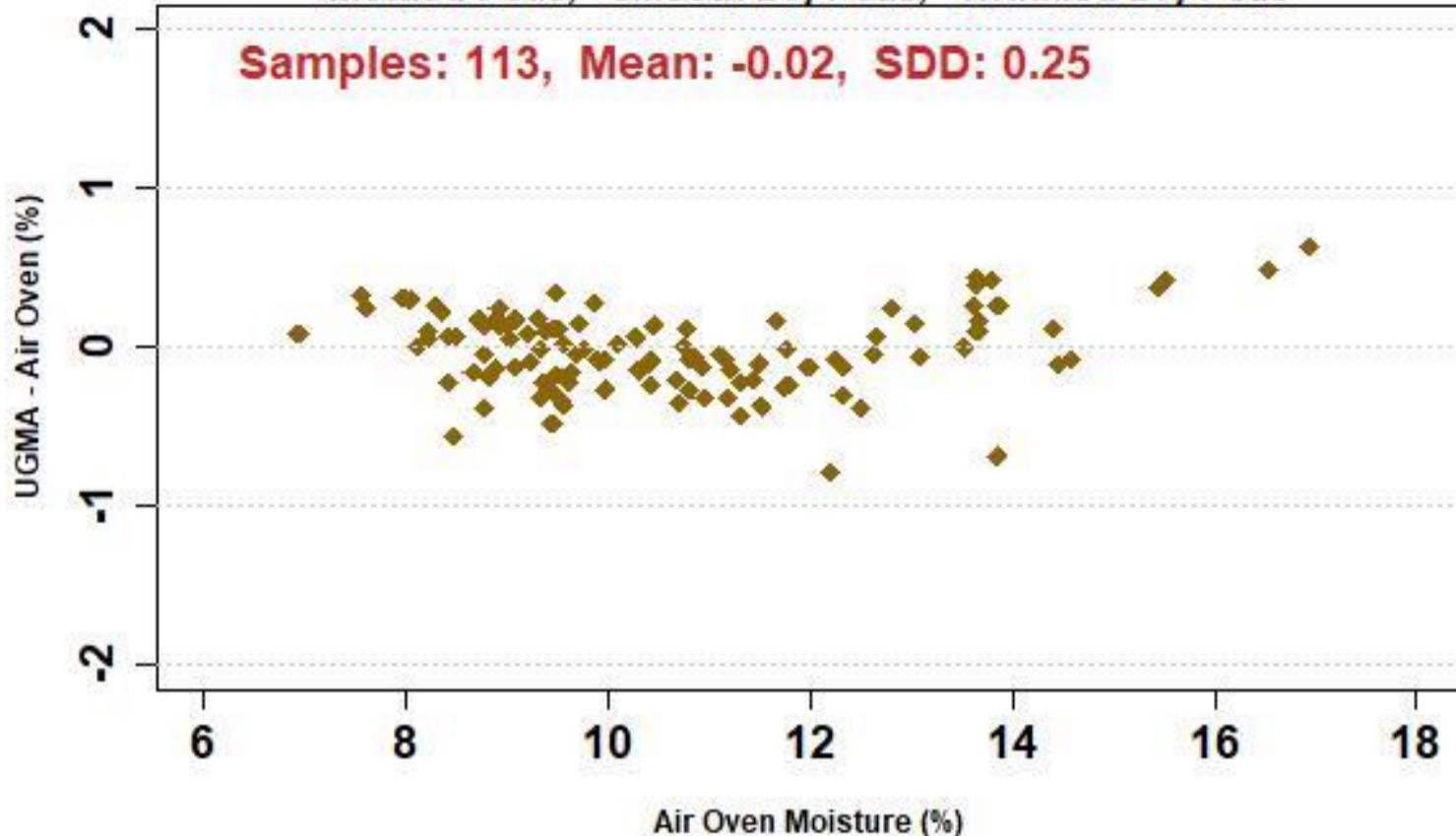
24. Beans 5 Grain Group



25. Peas Grain Group

Peas: 2012 - 2023

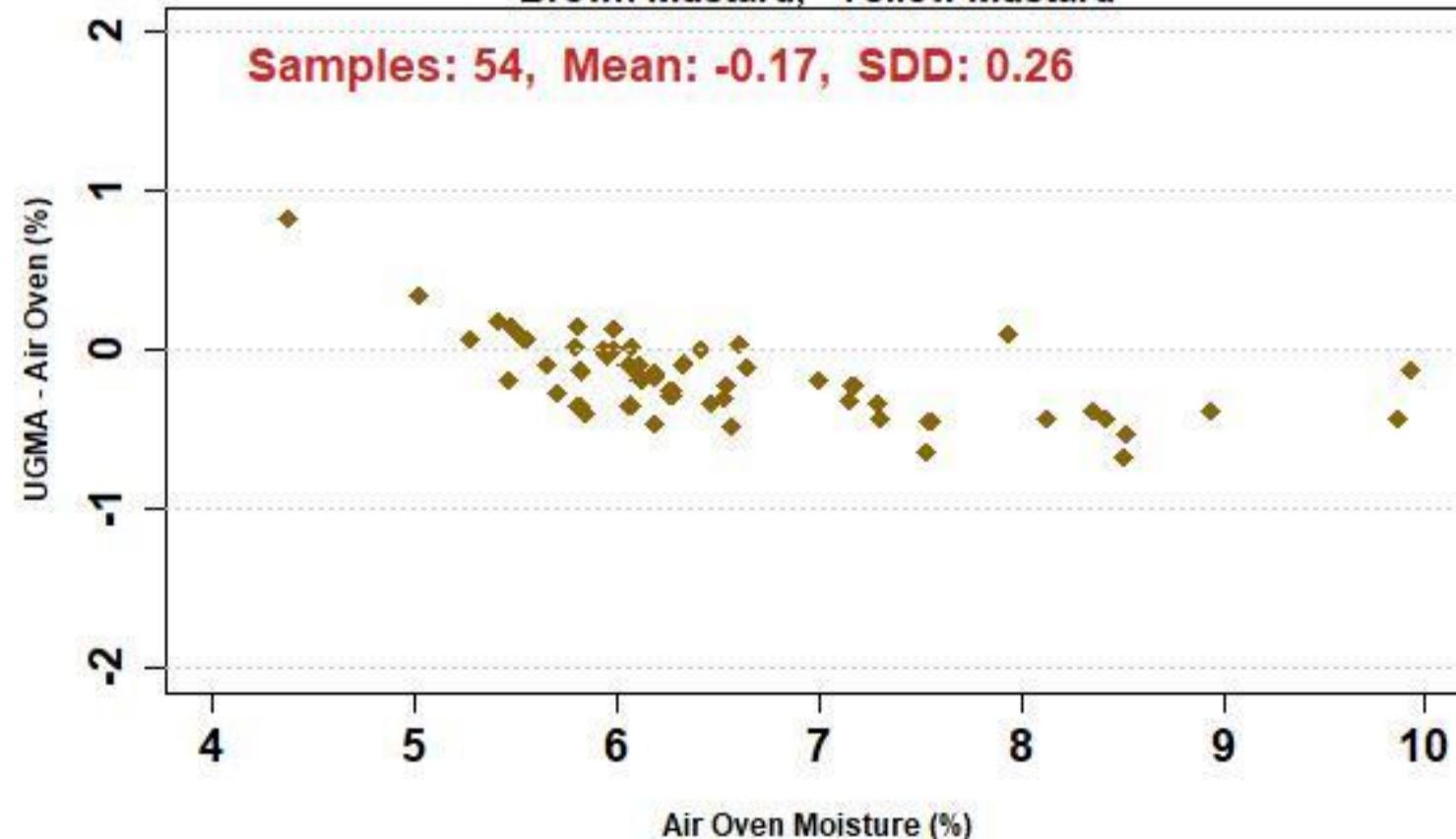
Mottled Peas, Smooth Dry Peas, Wrinkled Dry Peas



26. Mustard Grain Group

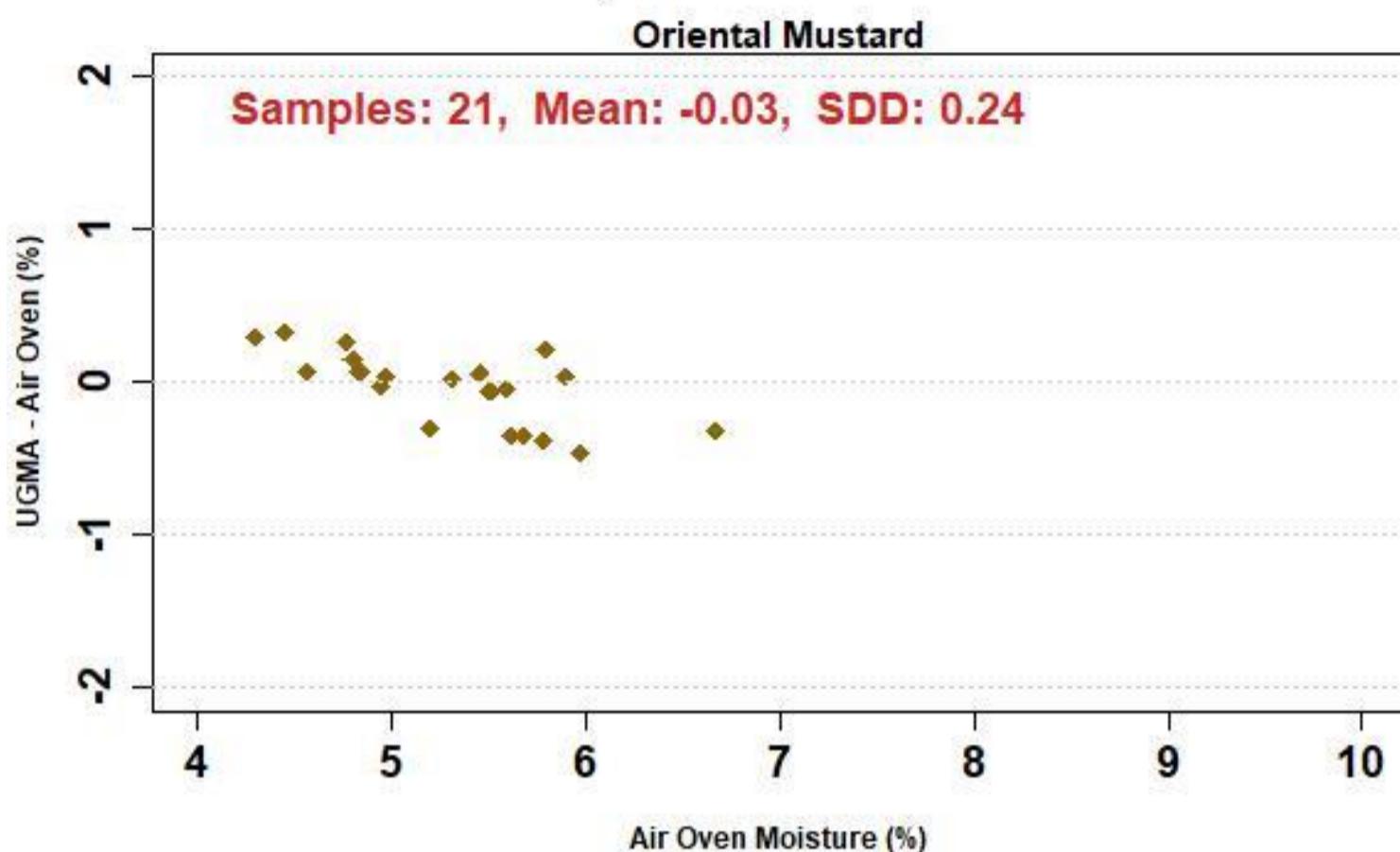
Mustard: 2012 - 2023

Brown Mustard, Yellow Mustard



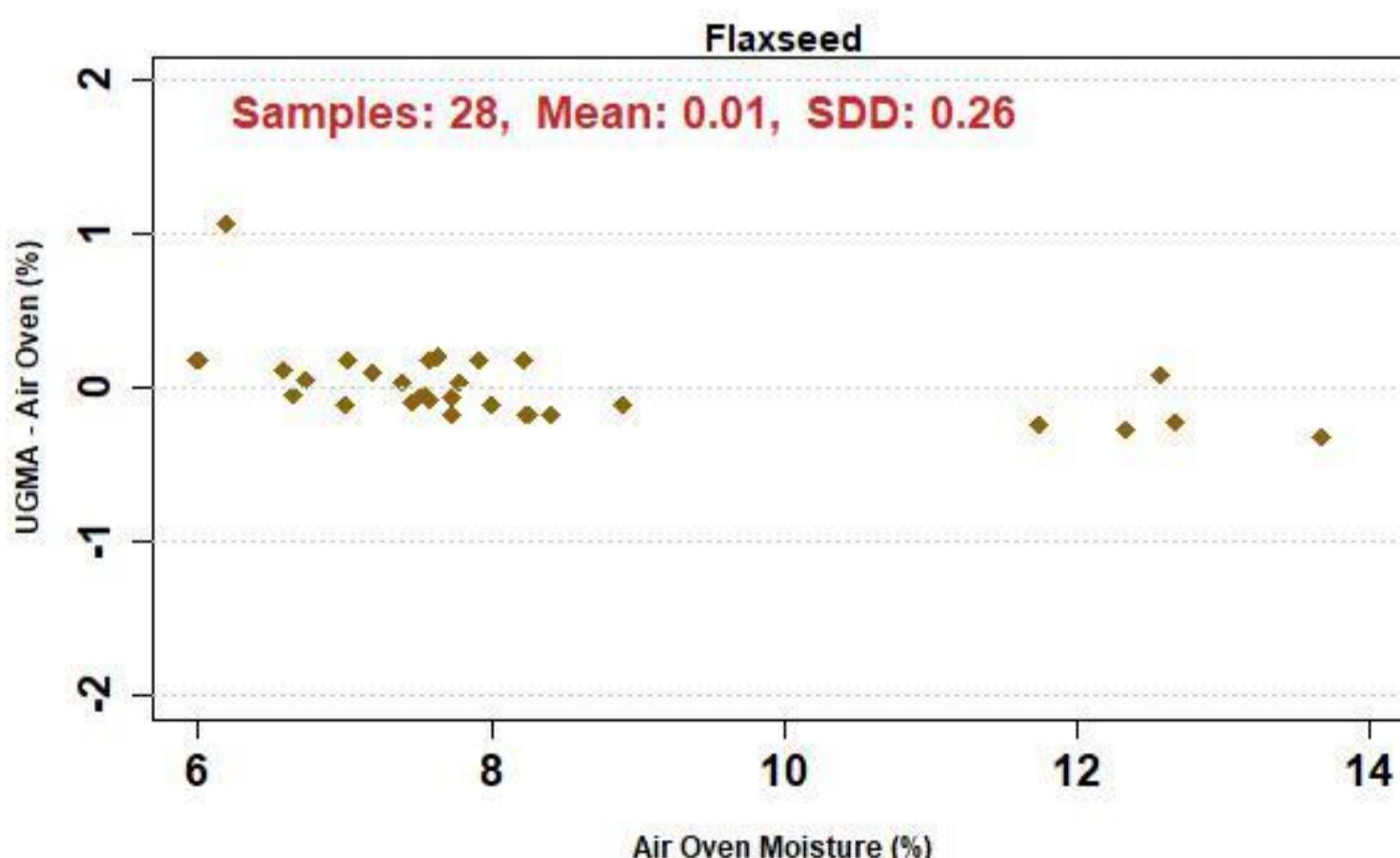
27. Oriental Mustard Grain Group

Mustard, Oriental: 2008 - 2023



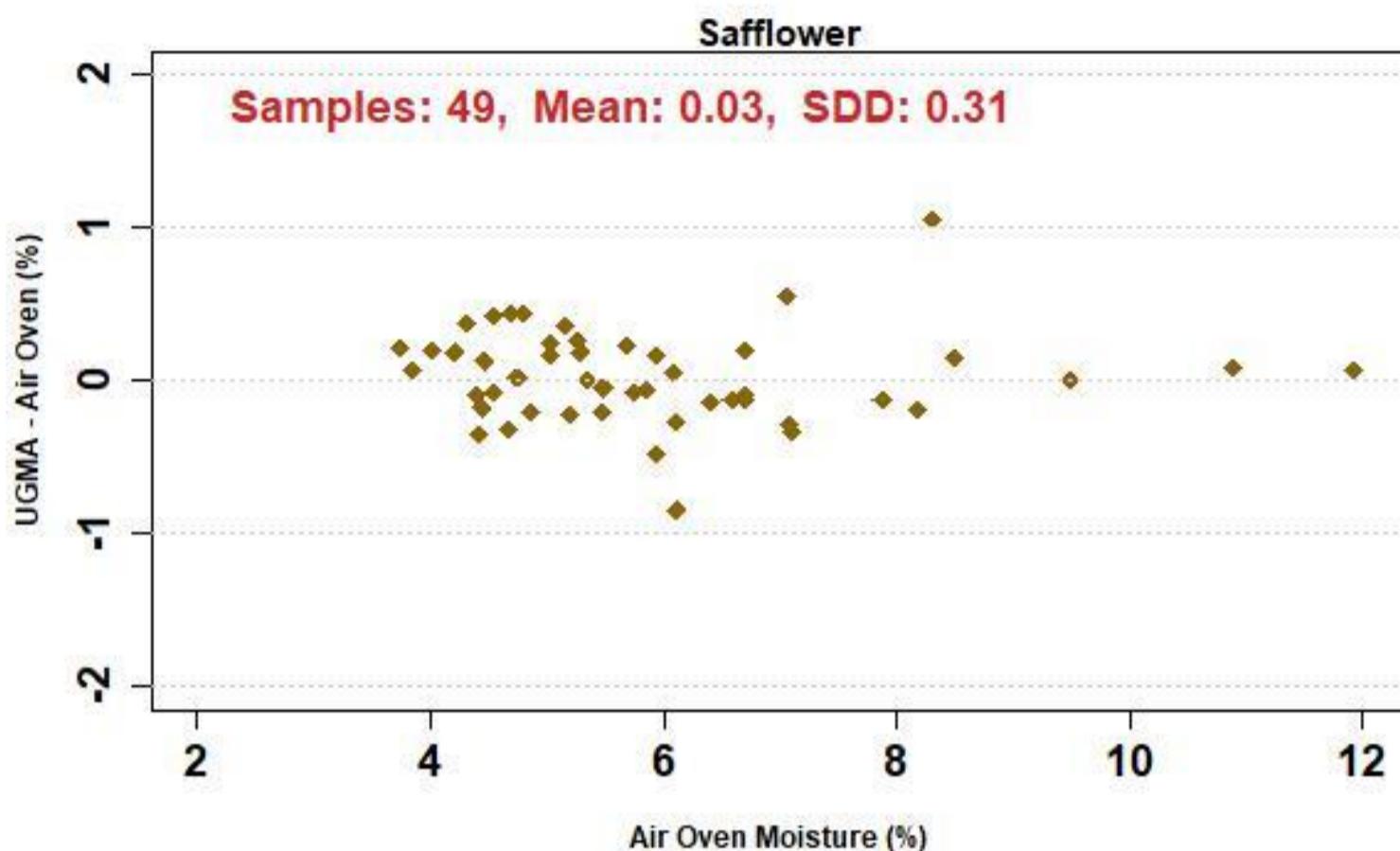
28. Flaxseed Grain Group

Flaxseed: 2009 - 2018



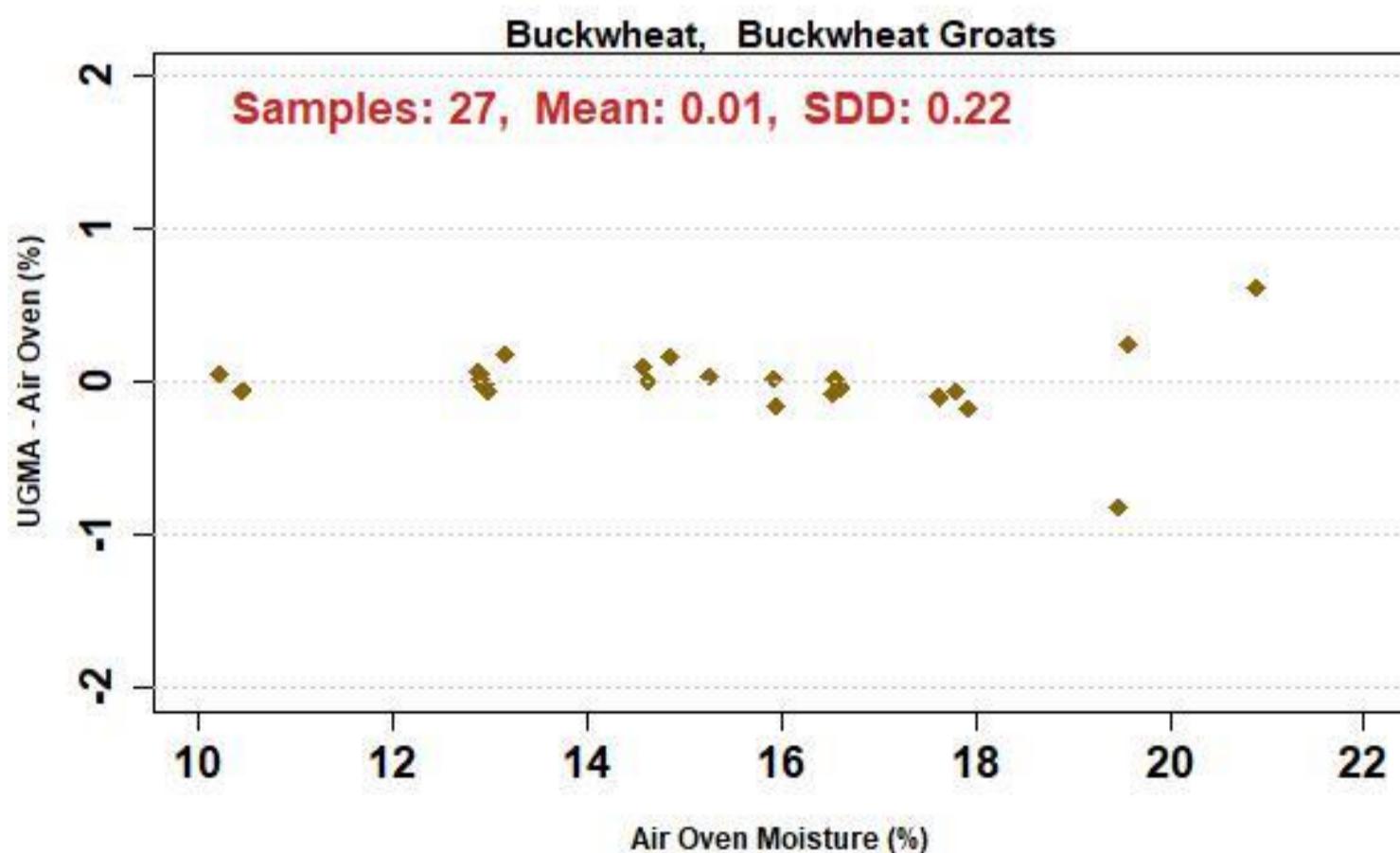
29. Safflower Grain Group

Safflower: 2009 - 2023



30. Buckwheat Grain Group

Buckwheat: 2012 - 2013



31. Popcorn Grain Group

Popcorn: 2012 - 2022

