

Report

May 1, 2026

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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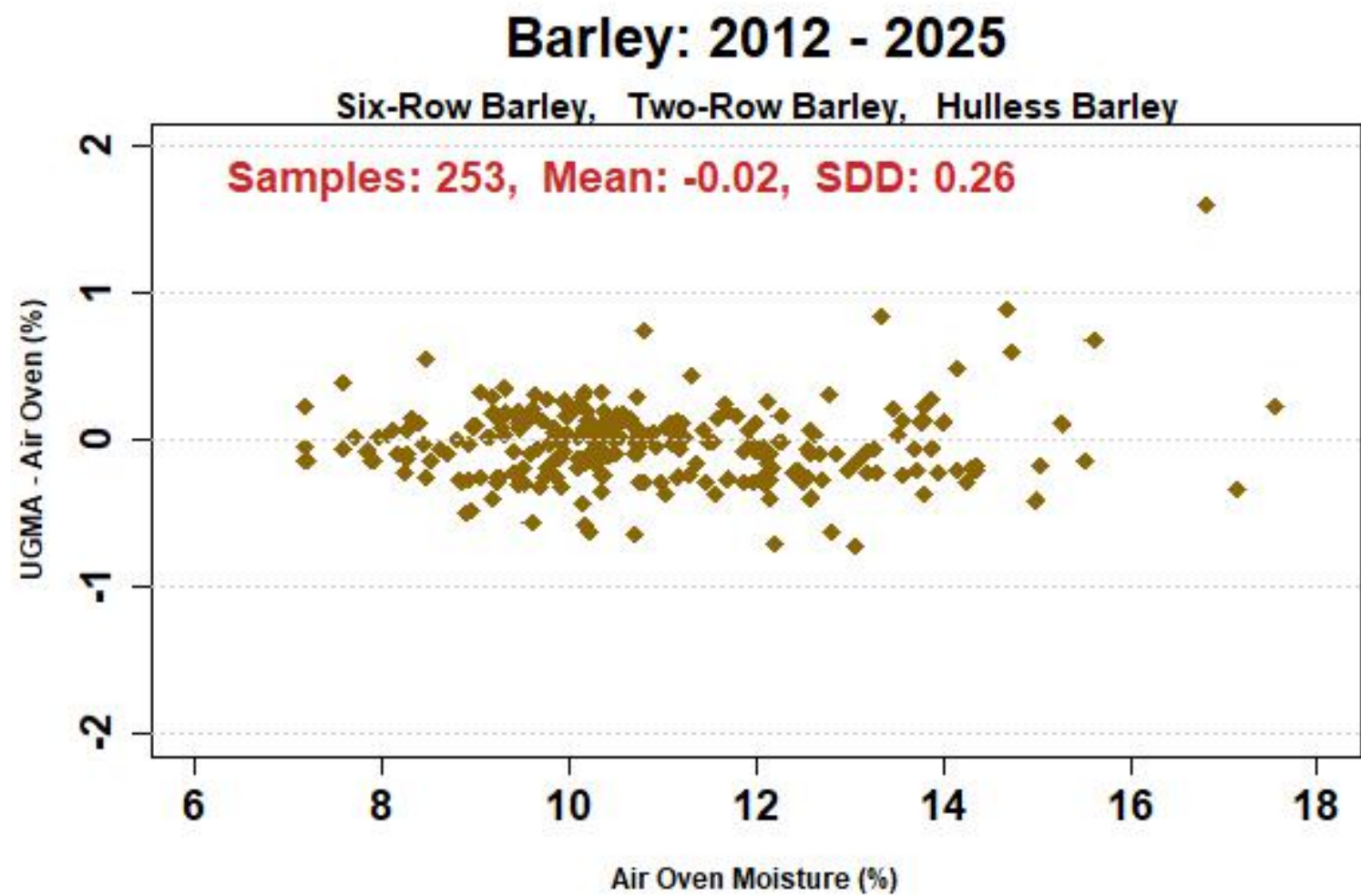
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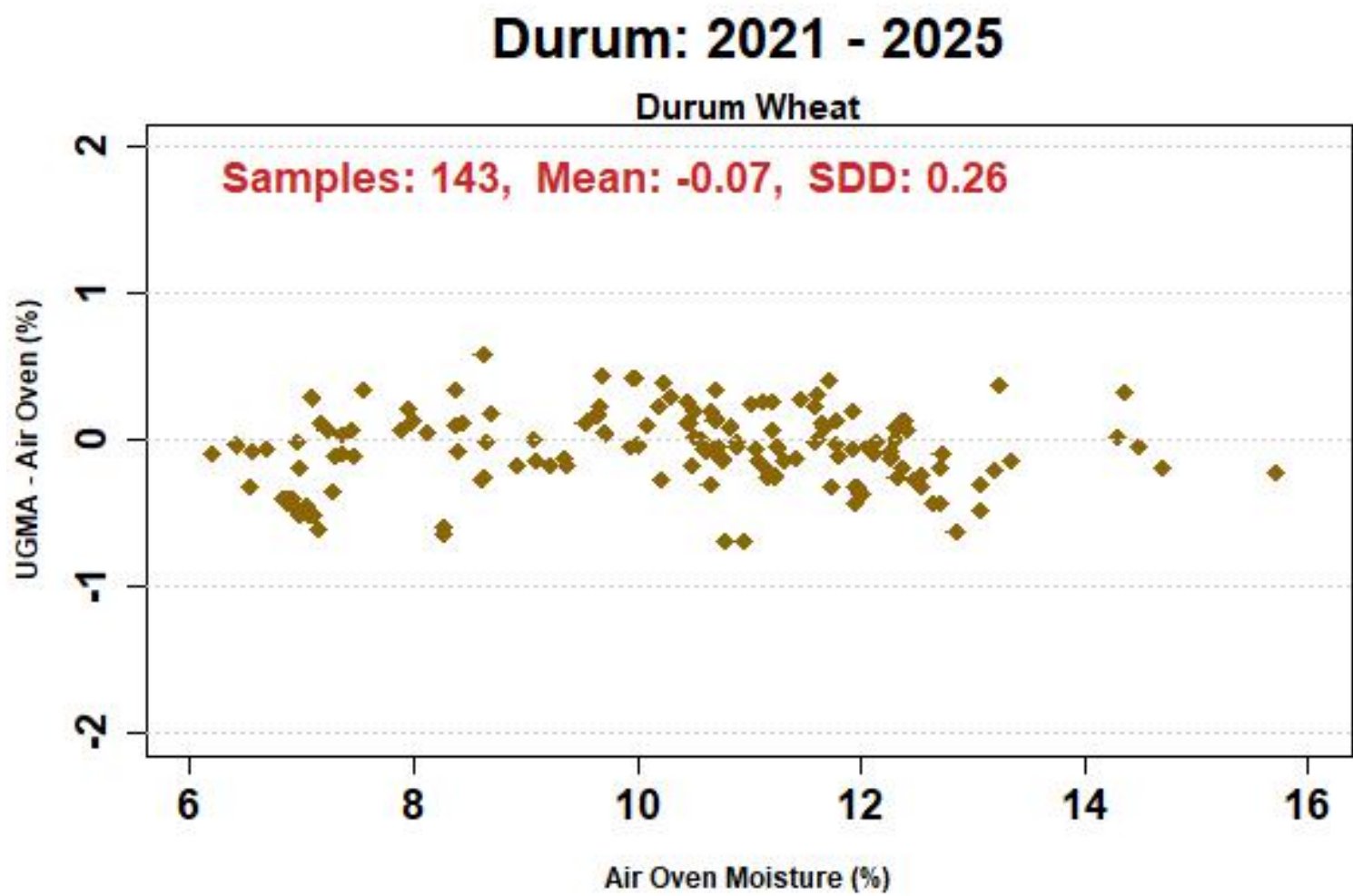
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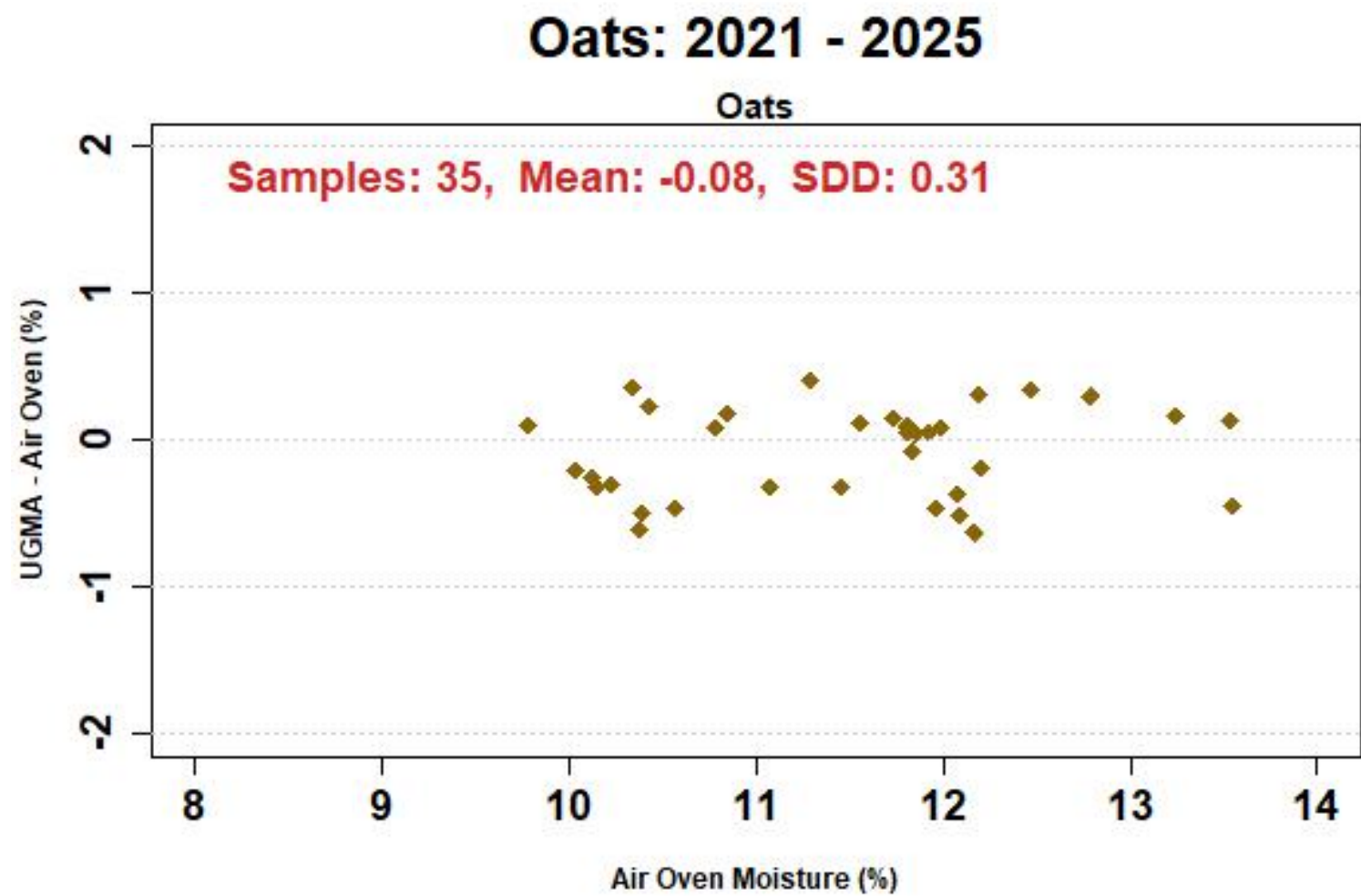
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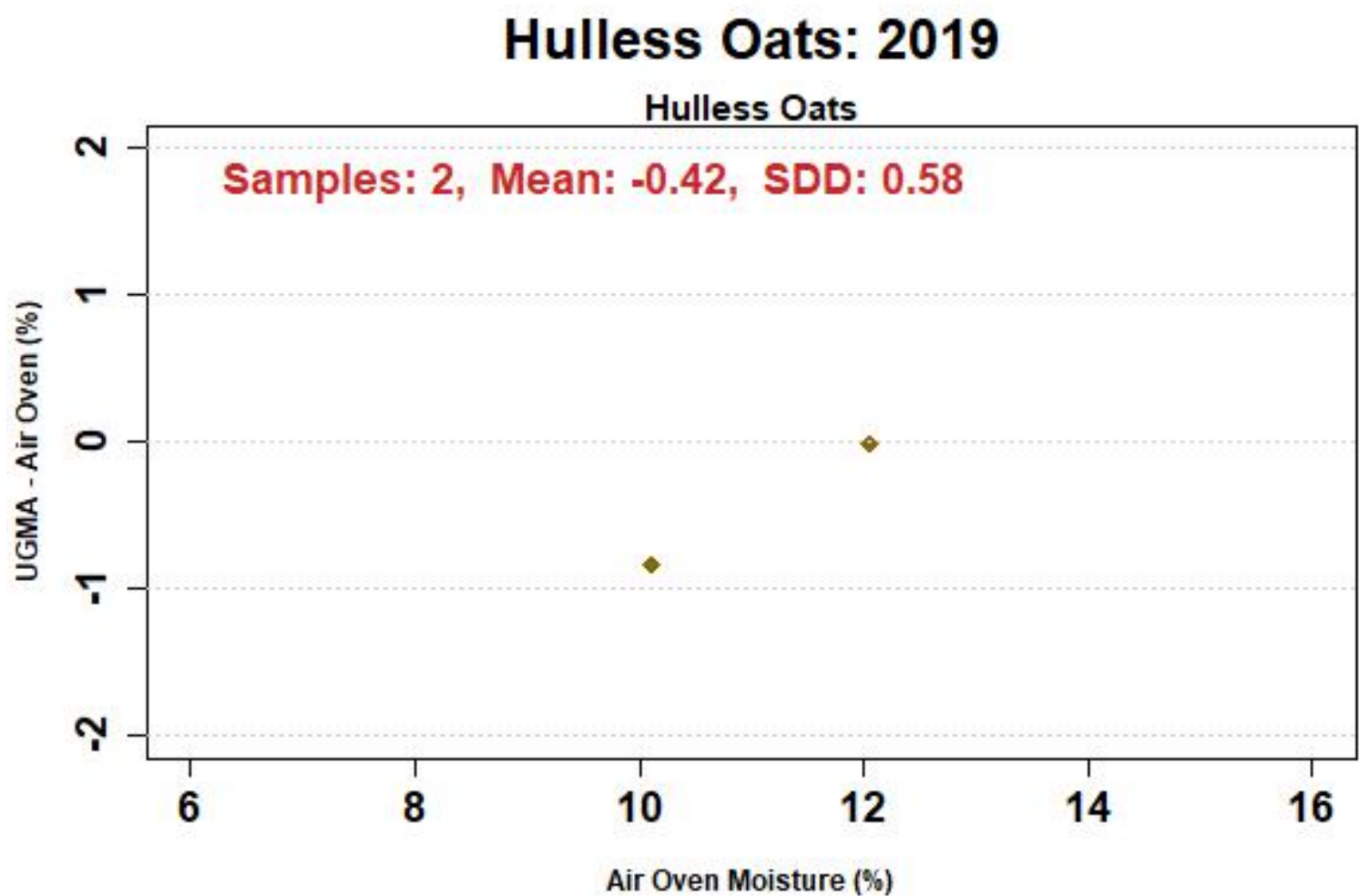
2. Durum Grain Group



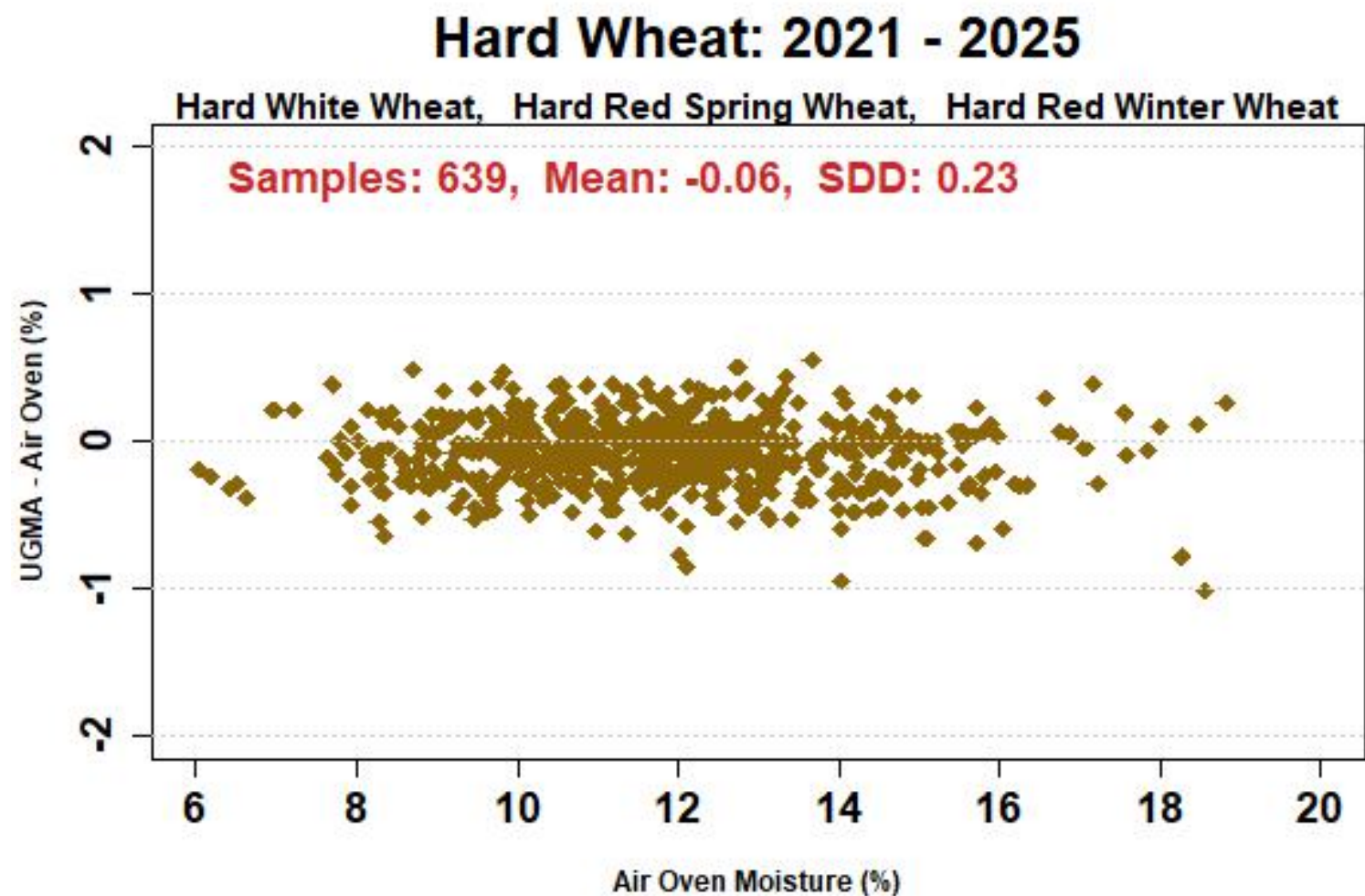
3. Oats Grain Group



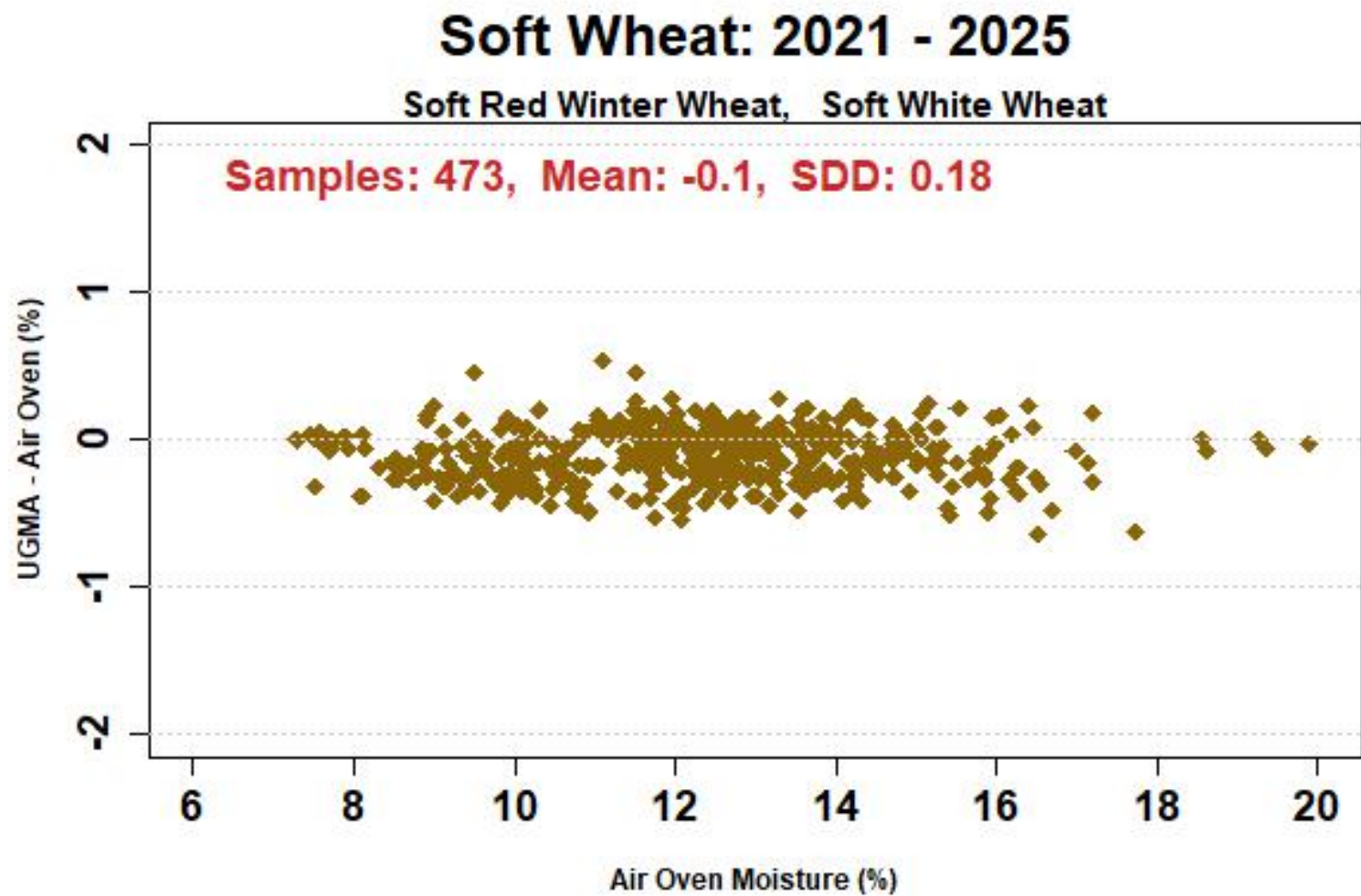
4. Hulless Oats Grain Group



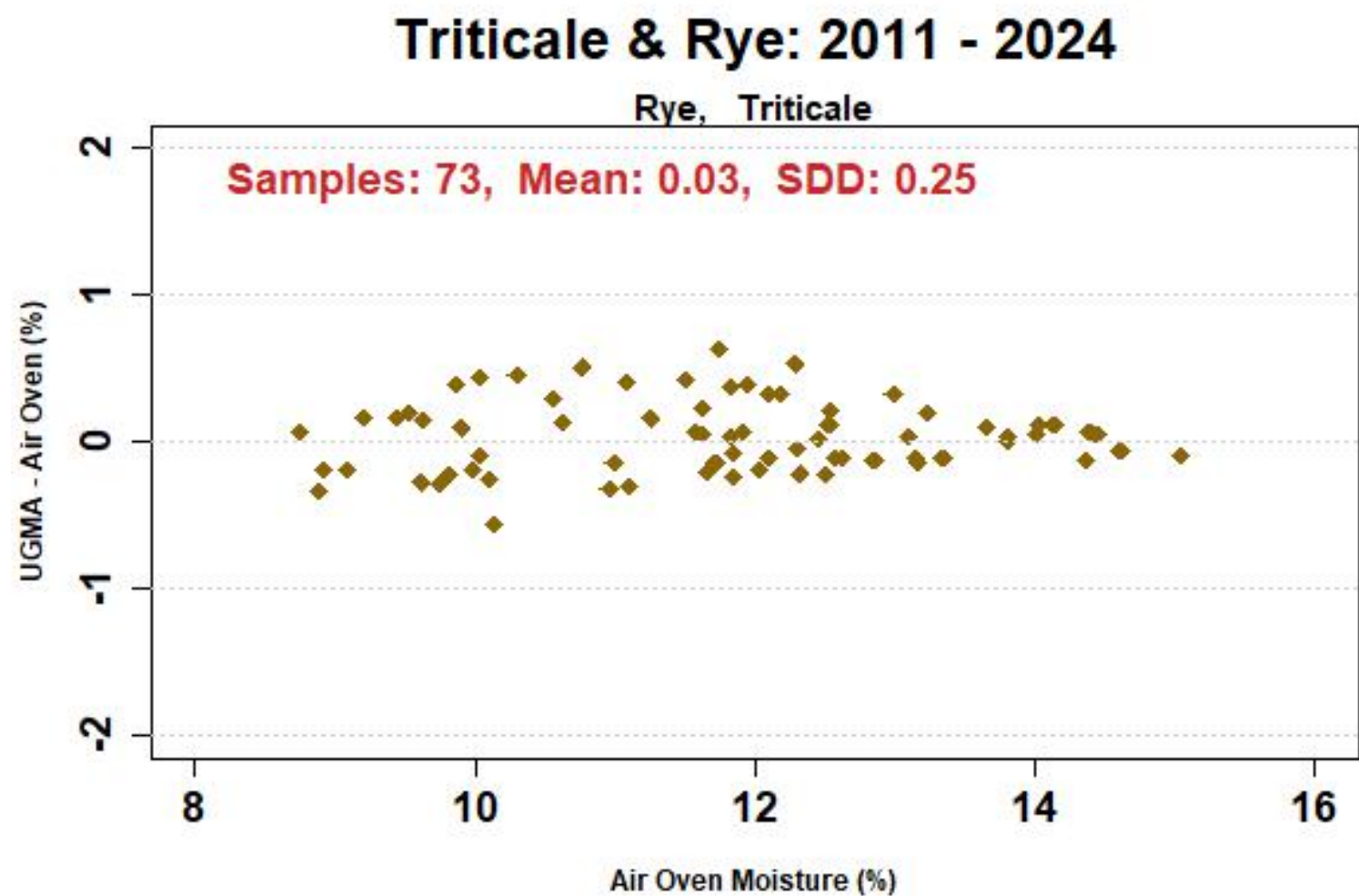
5. Hard wheat Grain Group



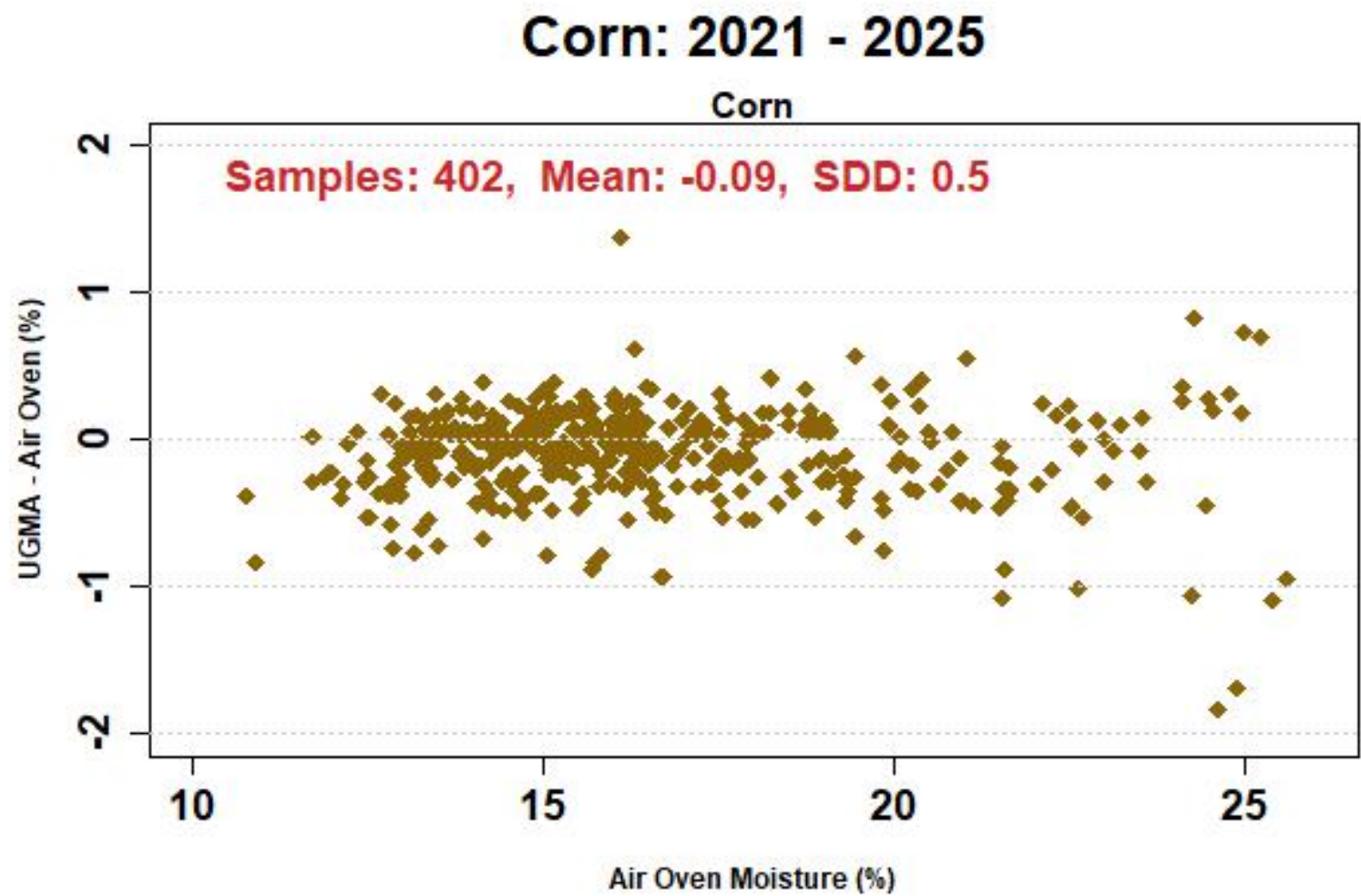
6. Soft Wheat Grain Group



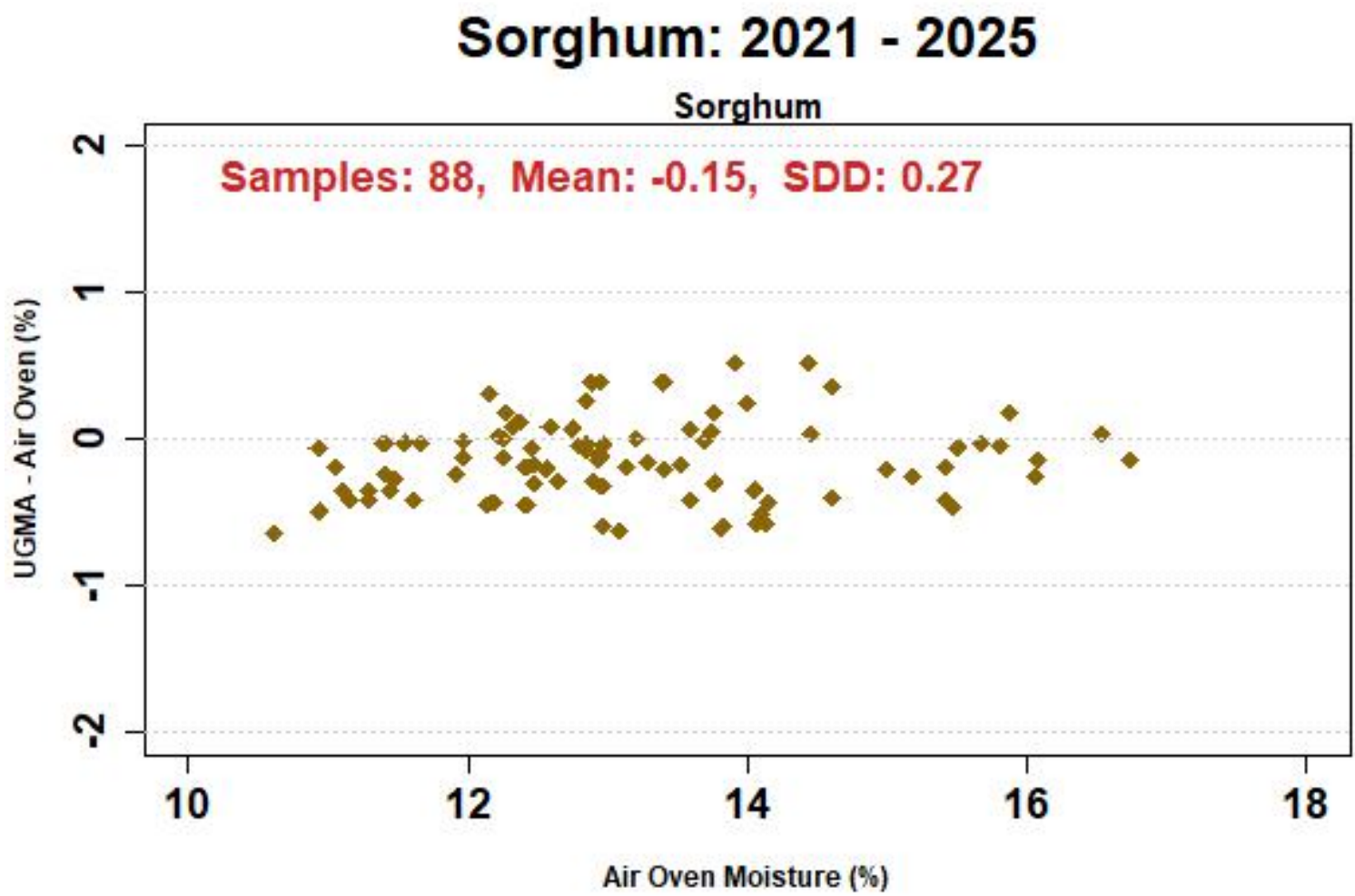
7. Triticale & Rye Grain Group



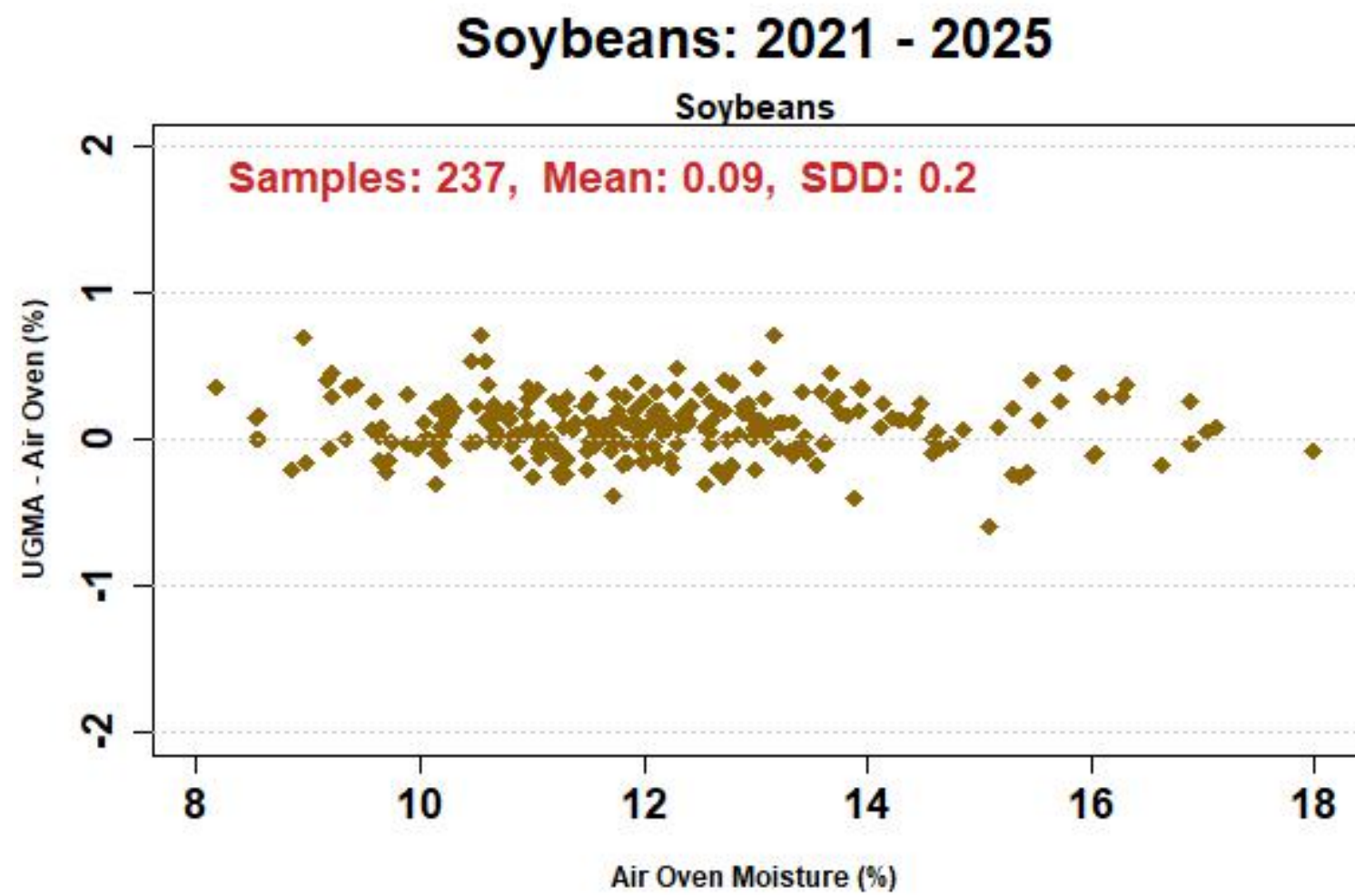
8. Corn Grain Group



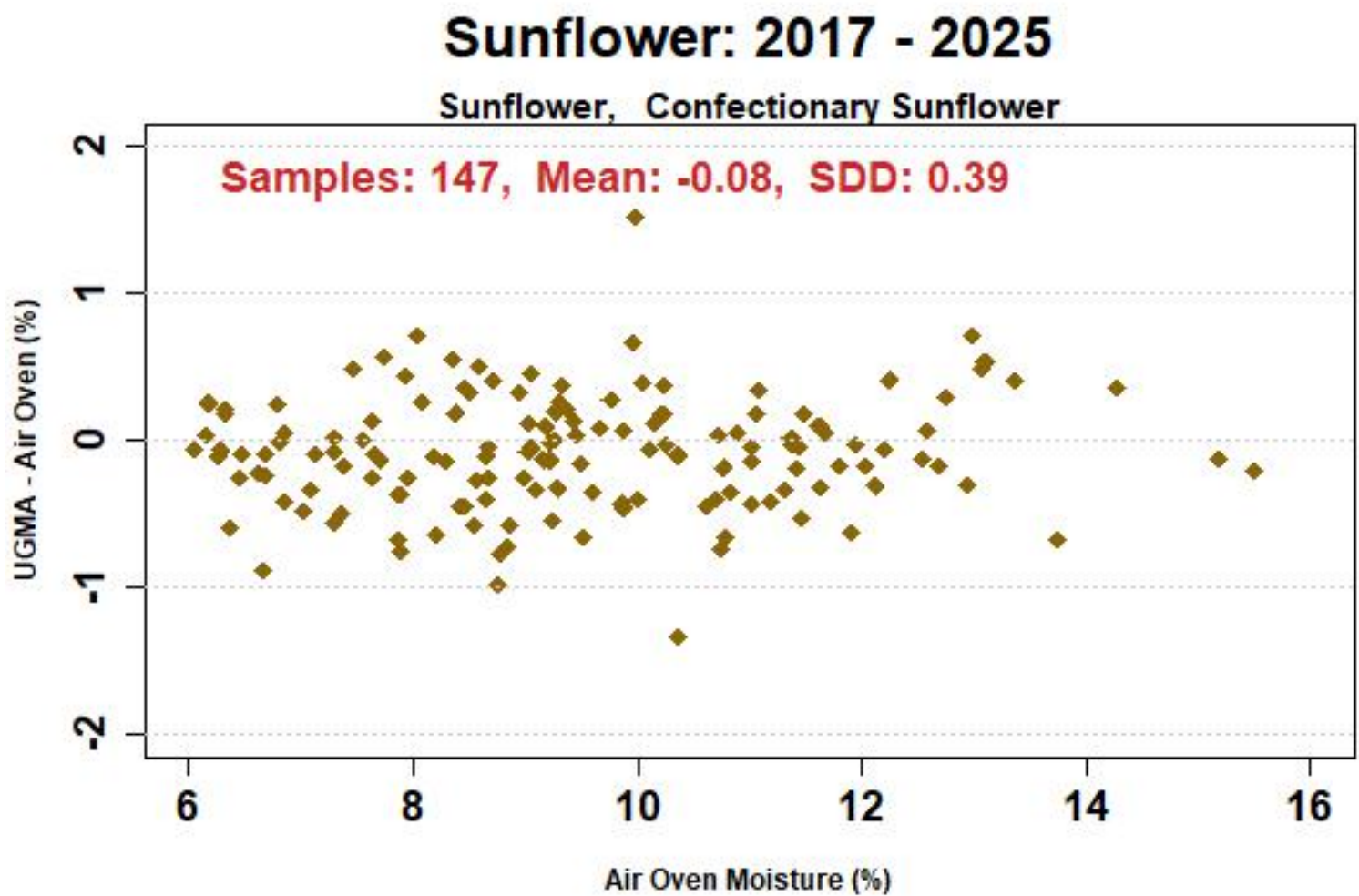
9. Sorghum Grain Group



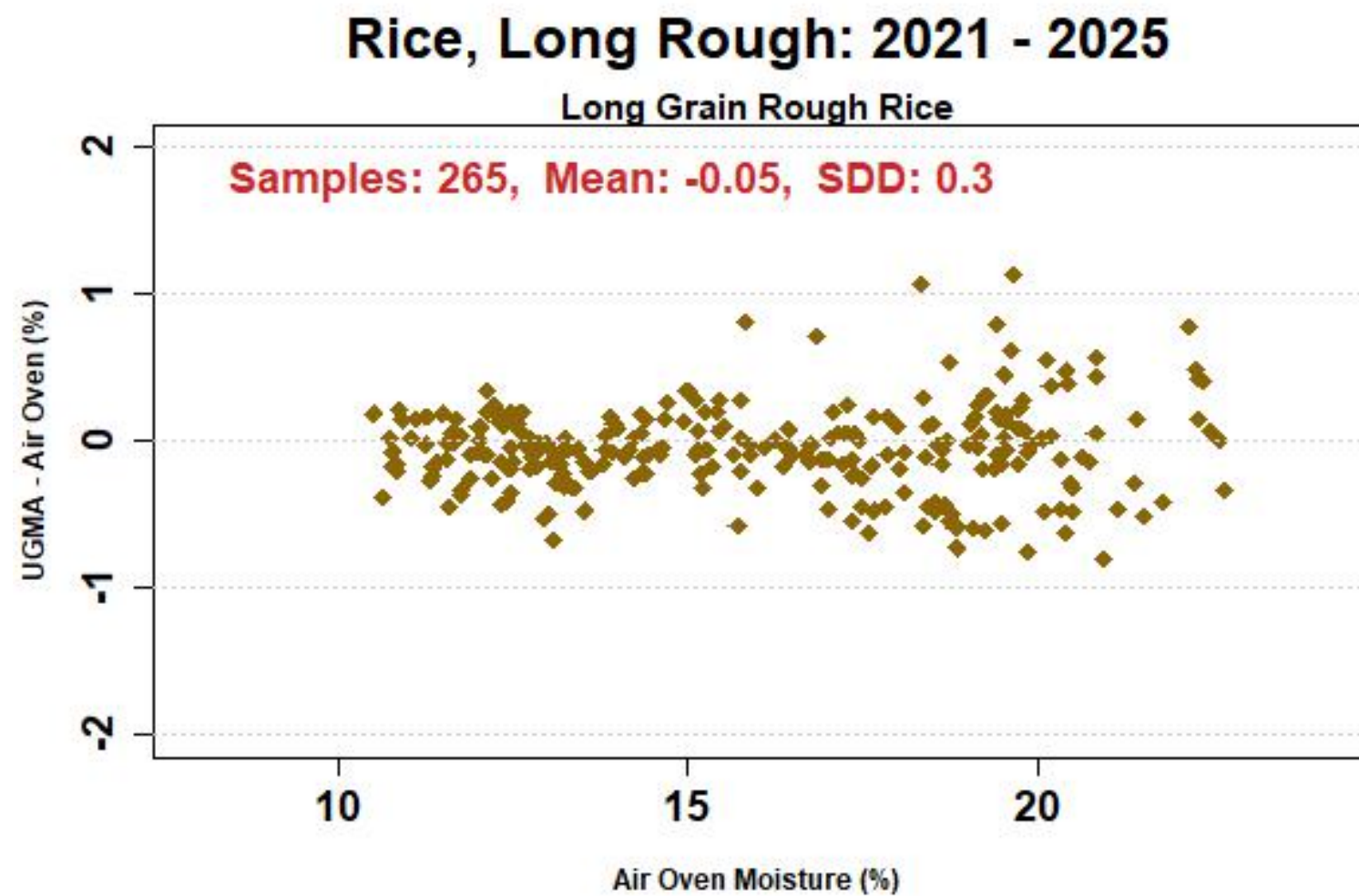
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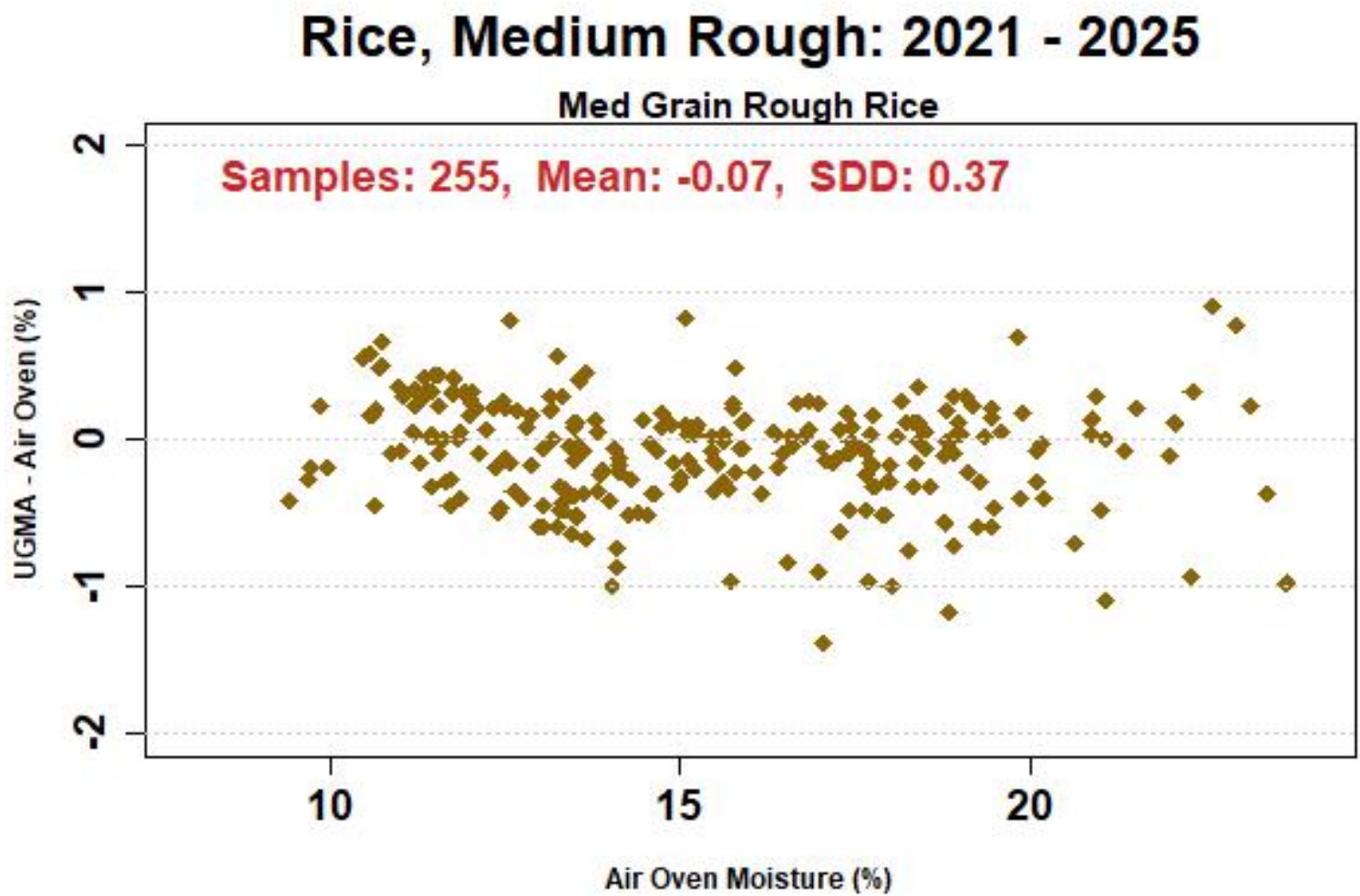
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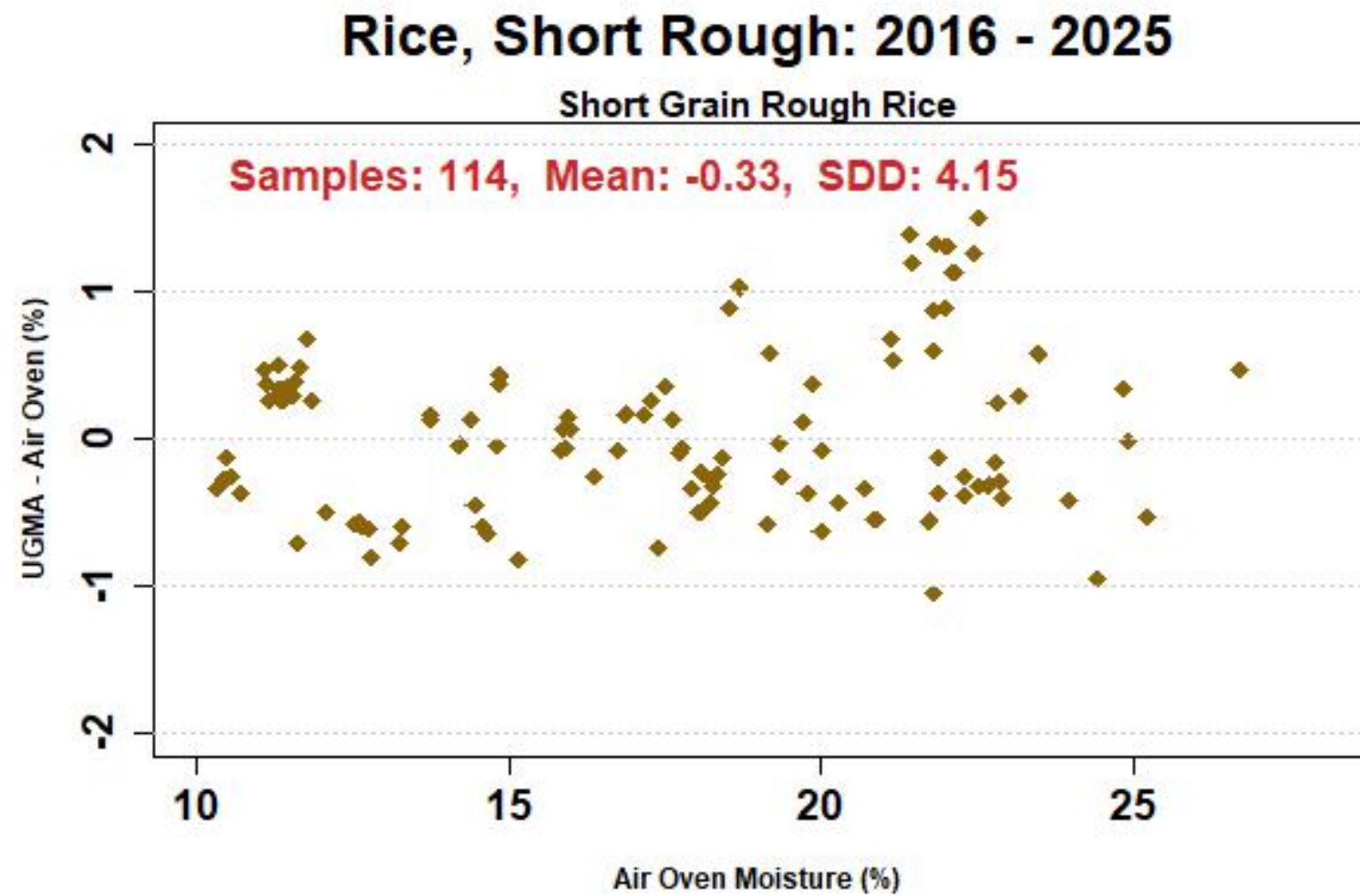
12. Long Grain Rough Rice Group



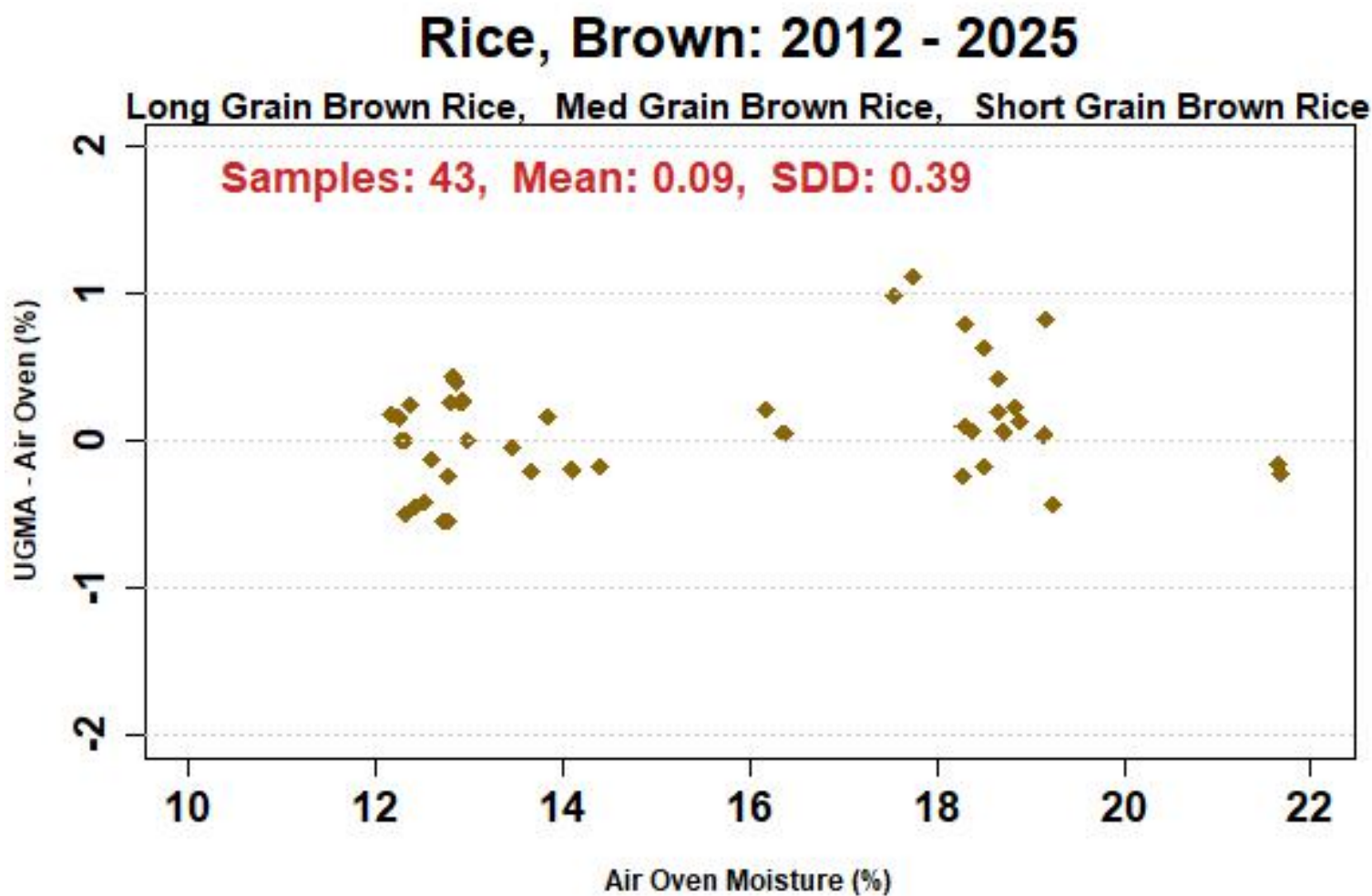
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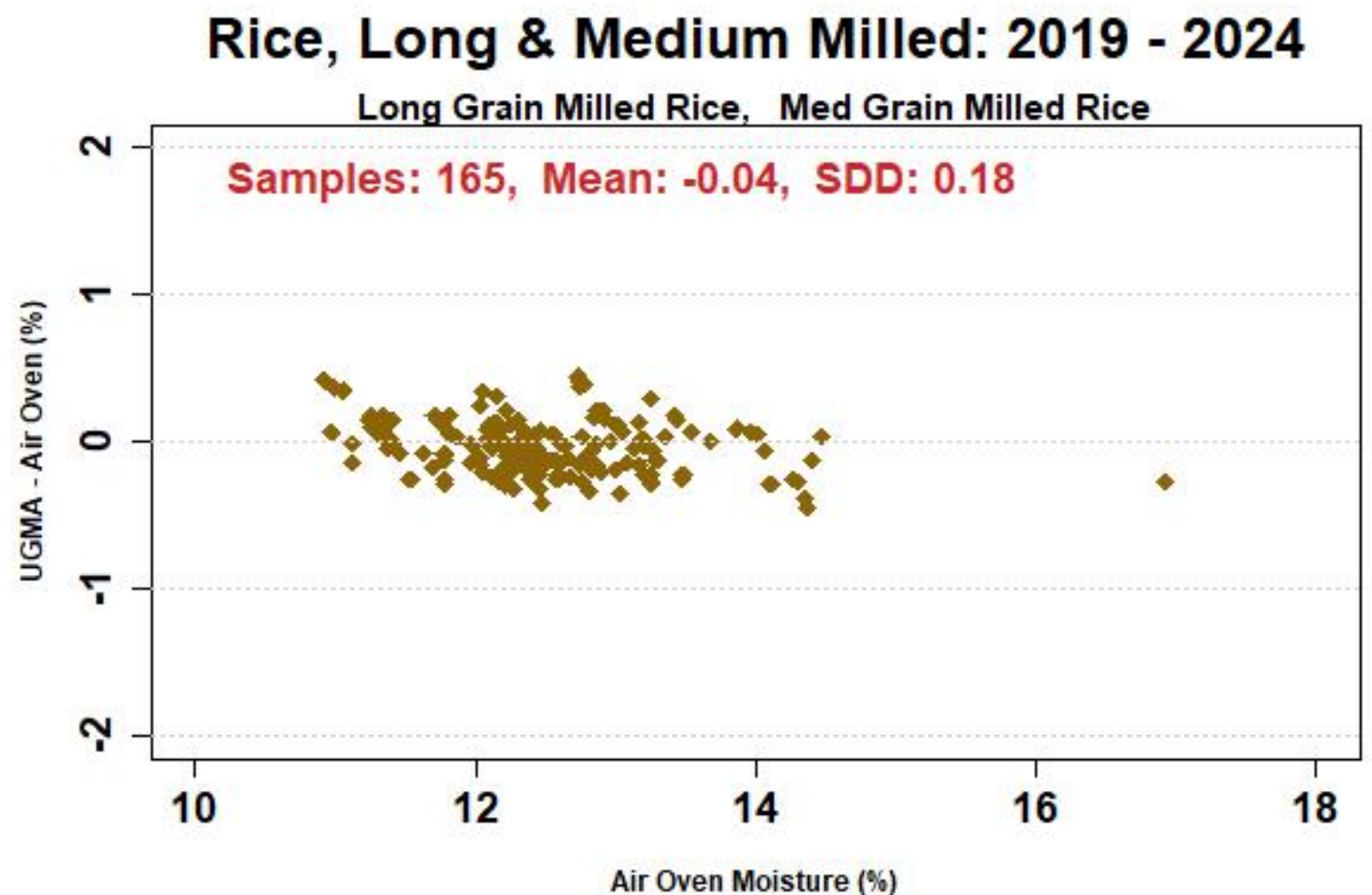
14. Short Grain Rough Rice Group



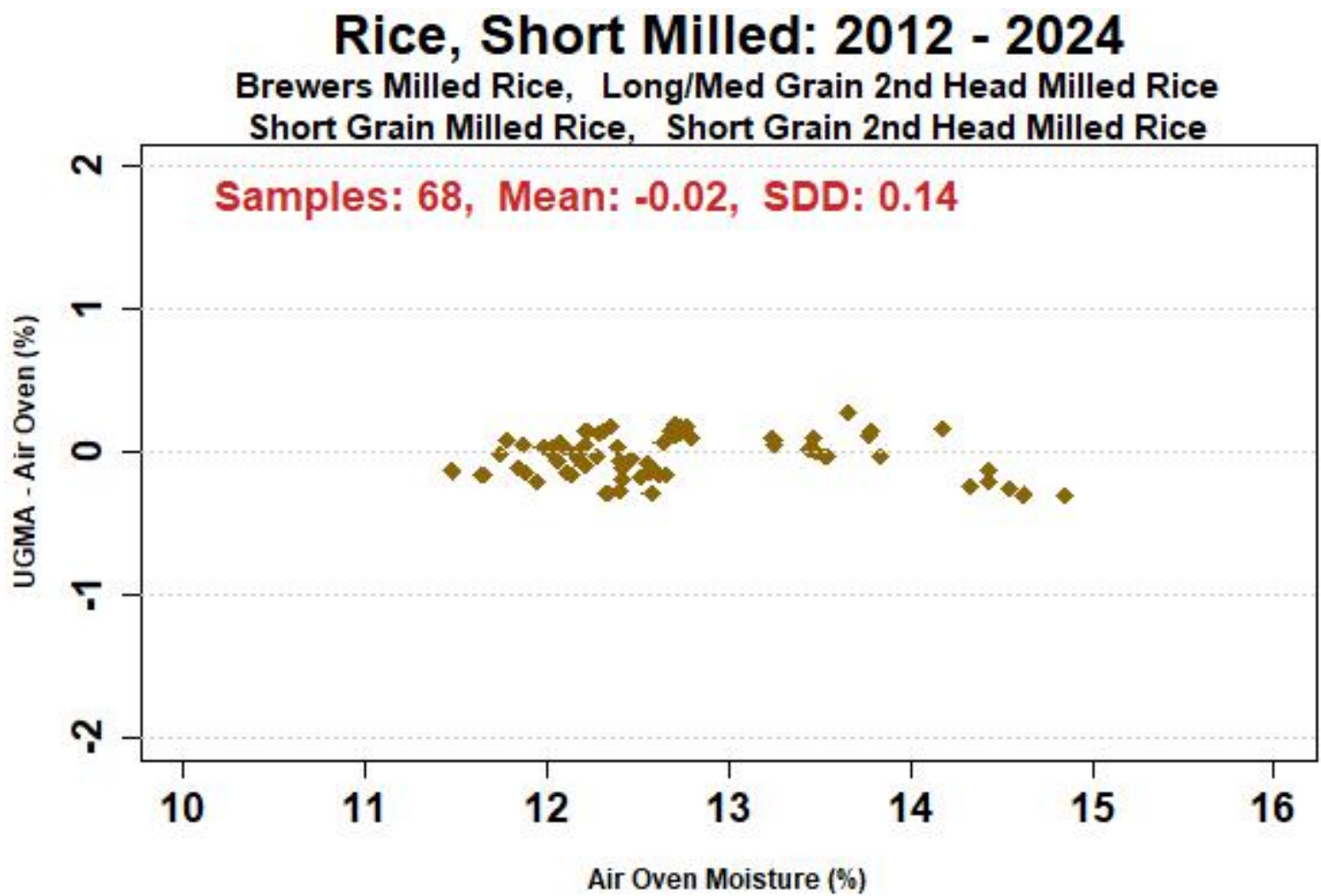
15. Brown Rice Group



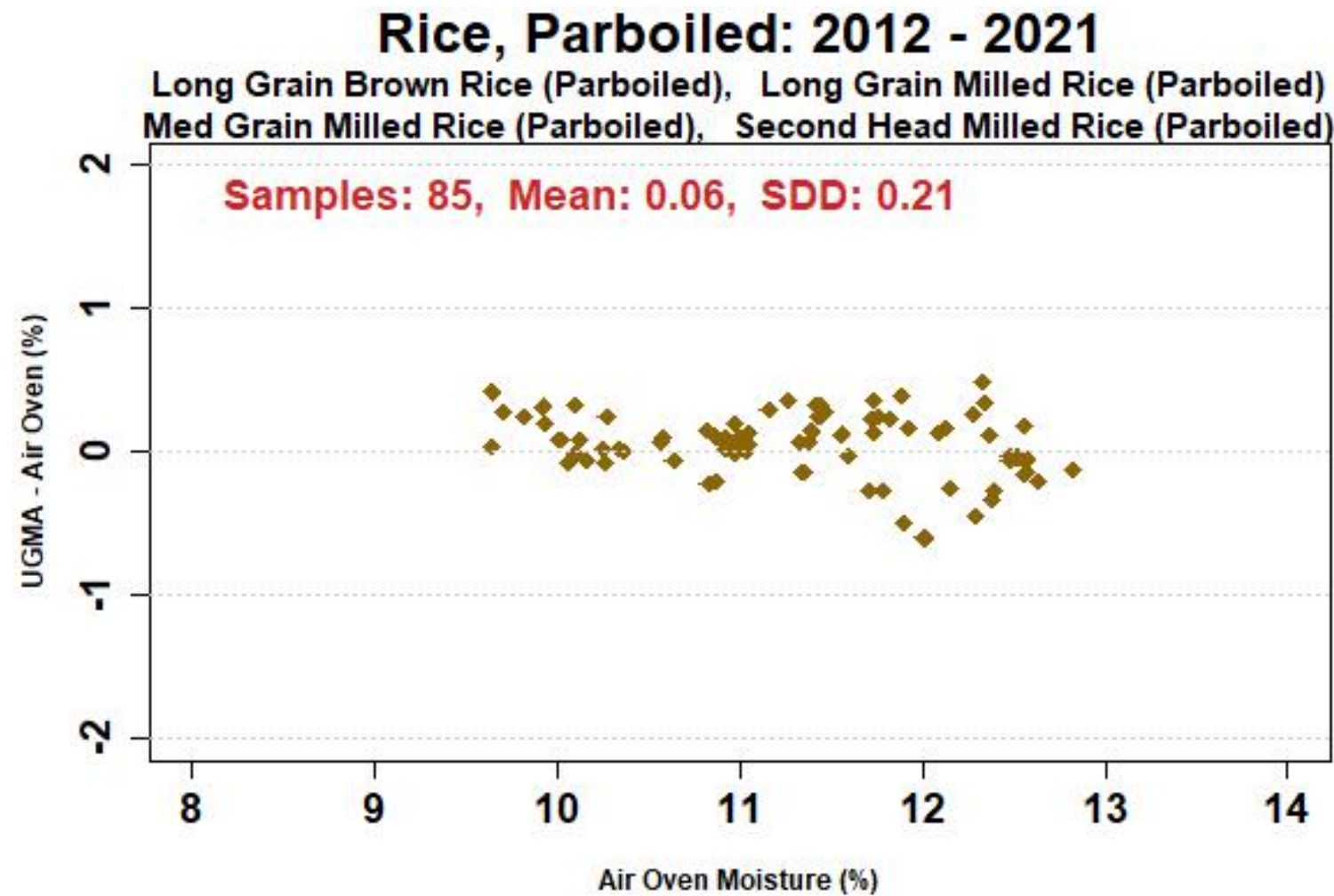
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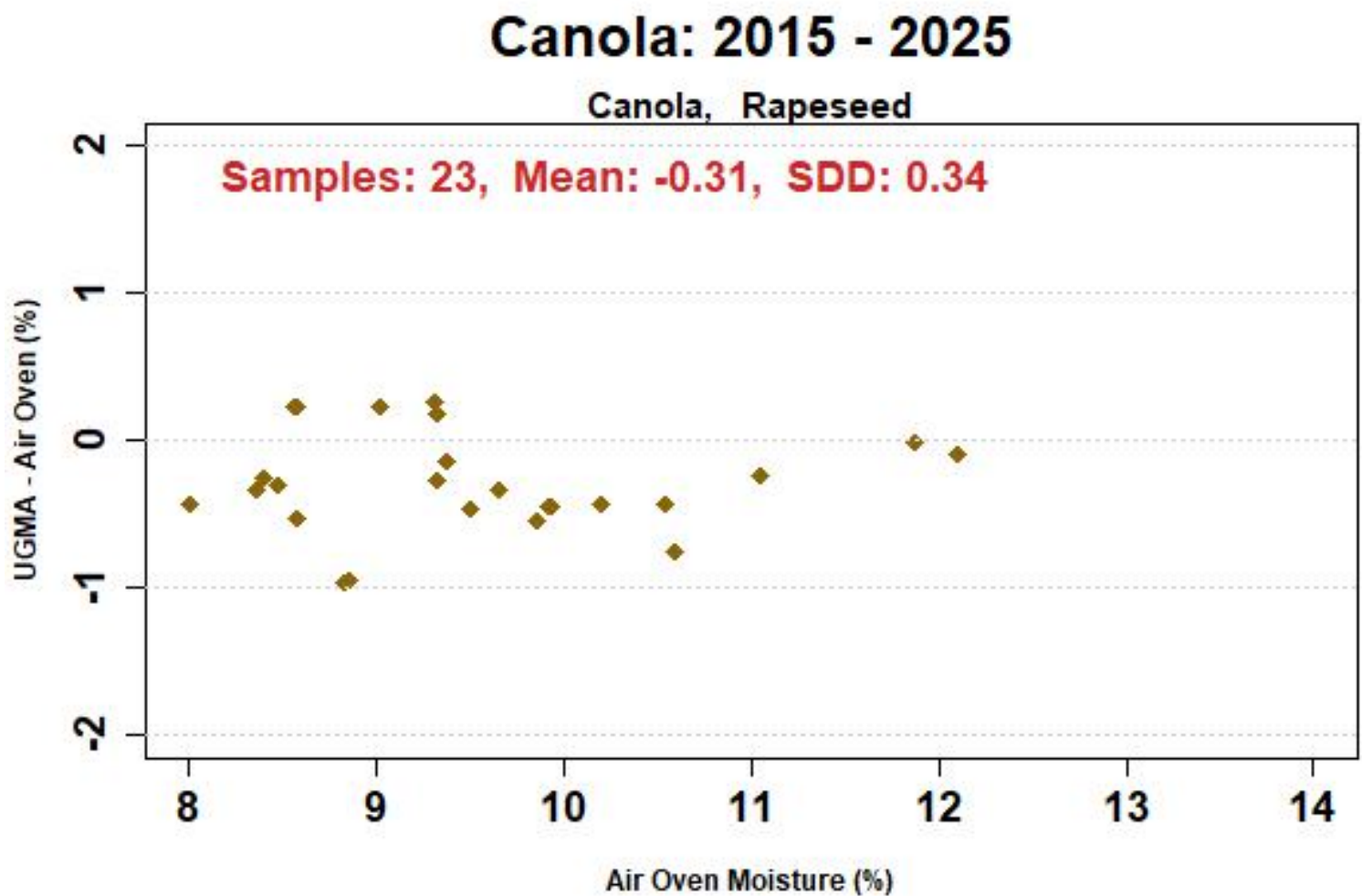
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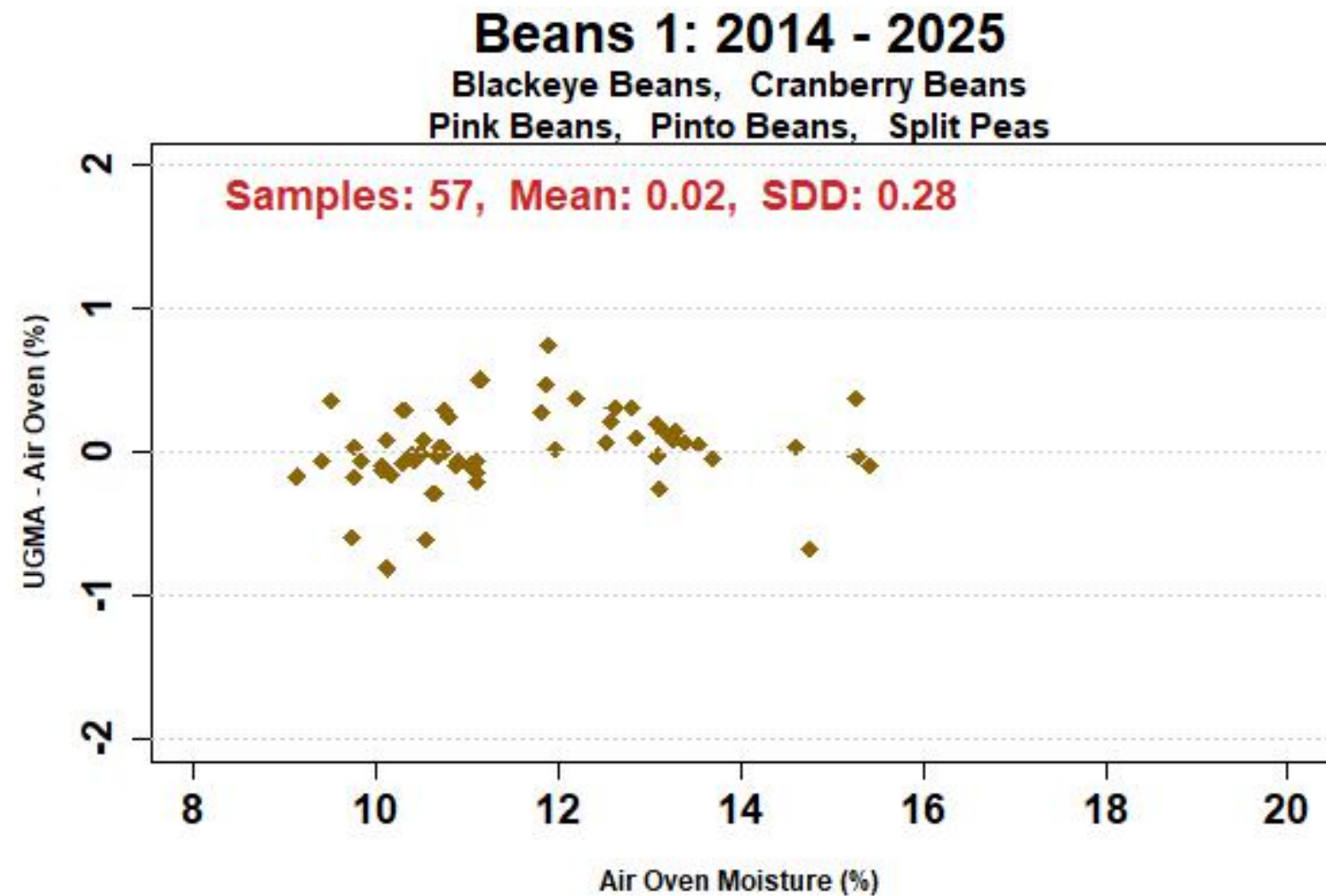
18. Parboiled Rice Group



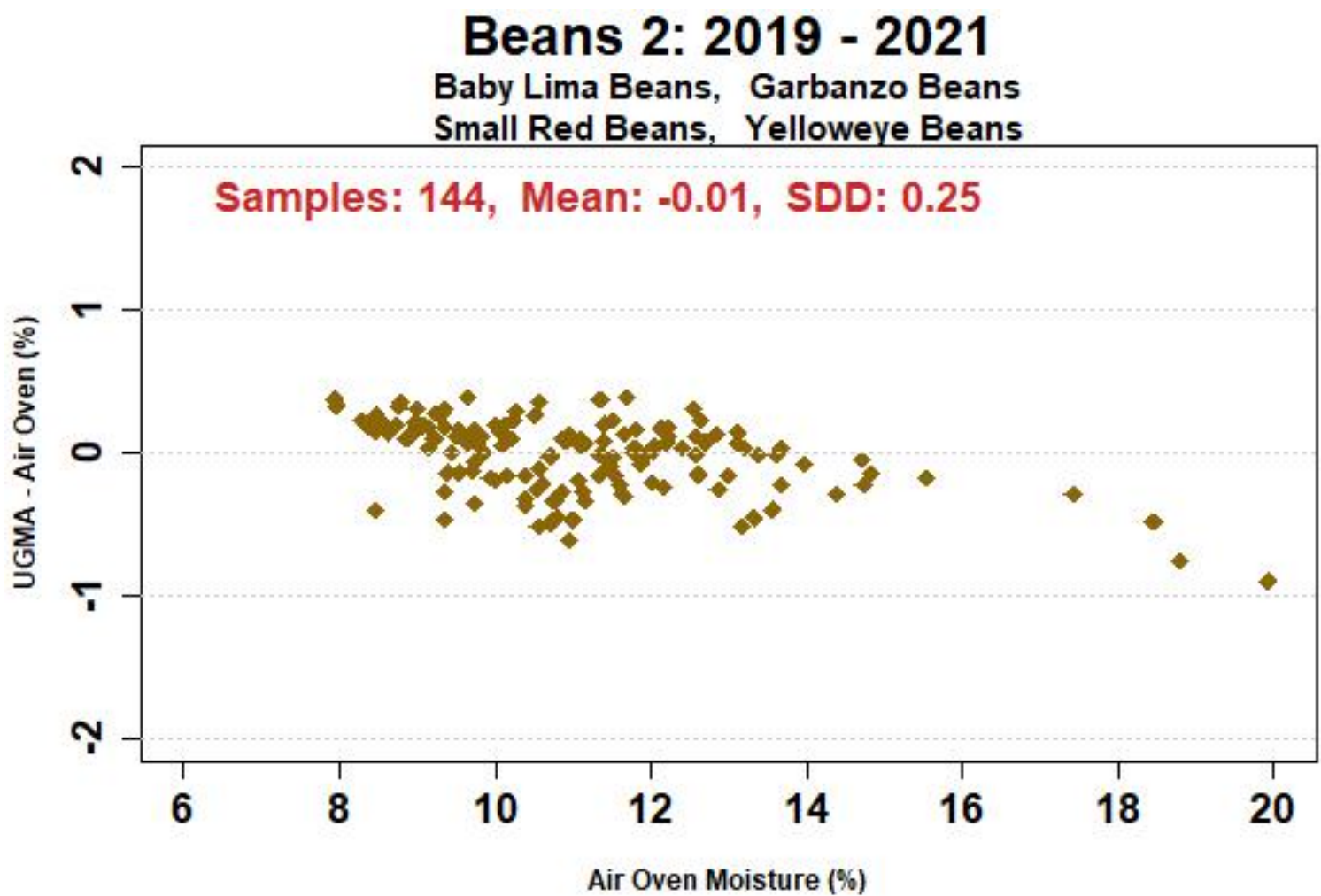
19. Canola Grain Group



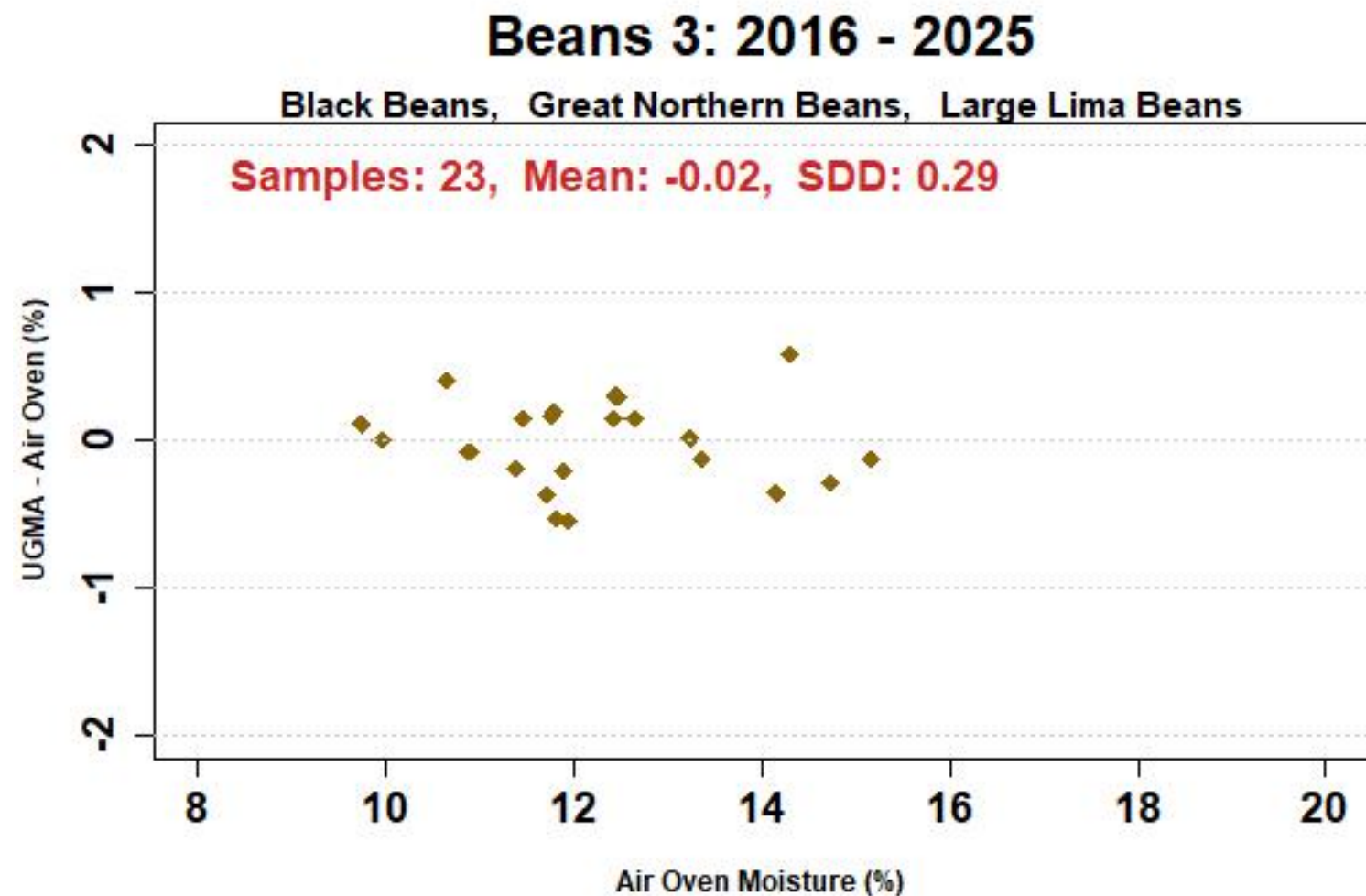
20. Beans 1 Grain Group



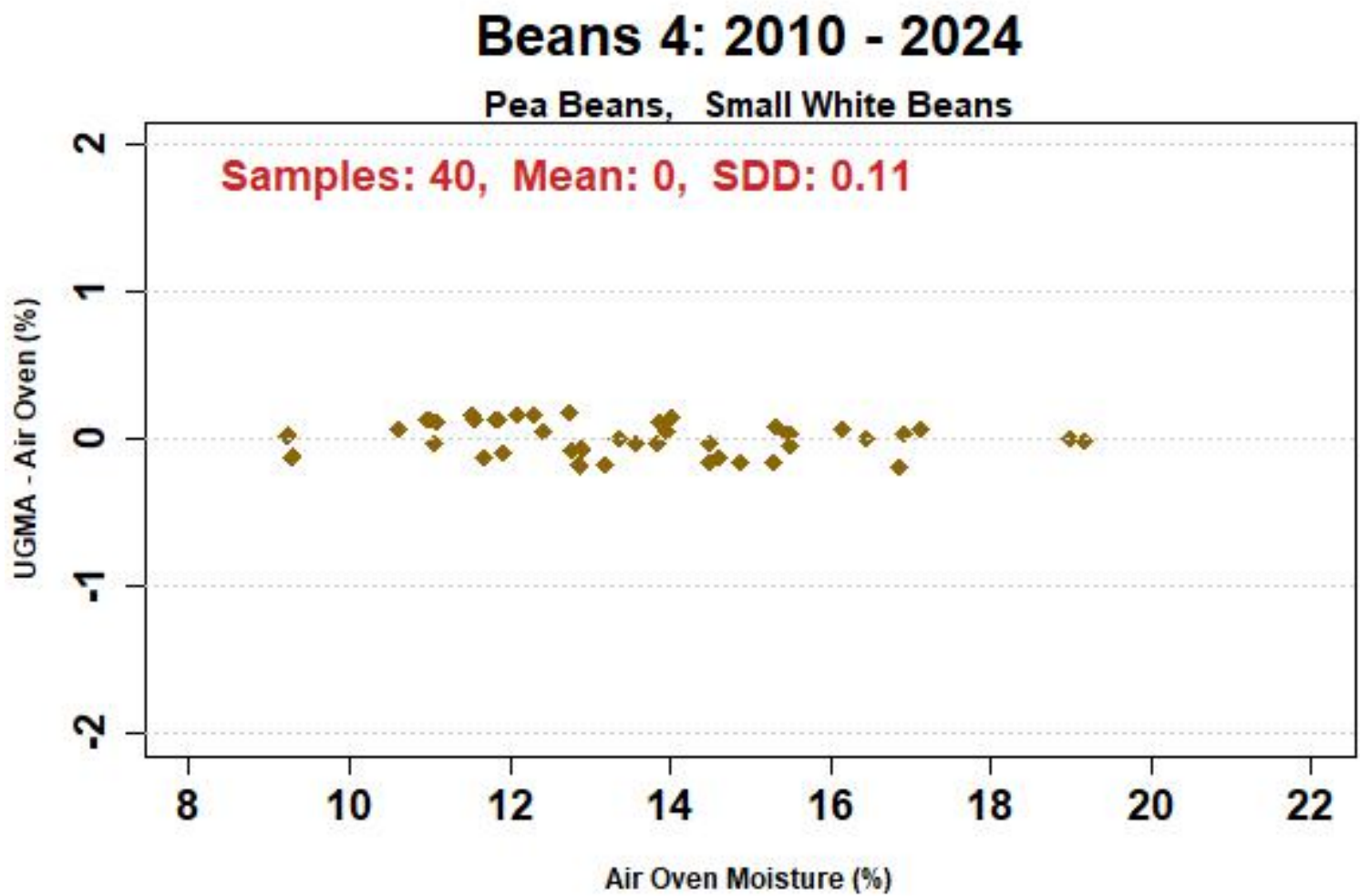
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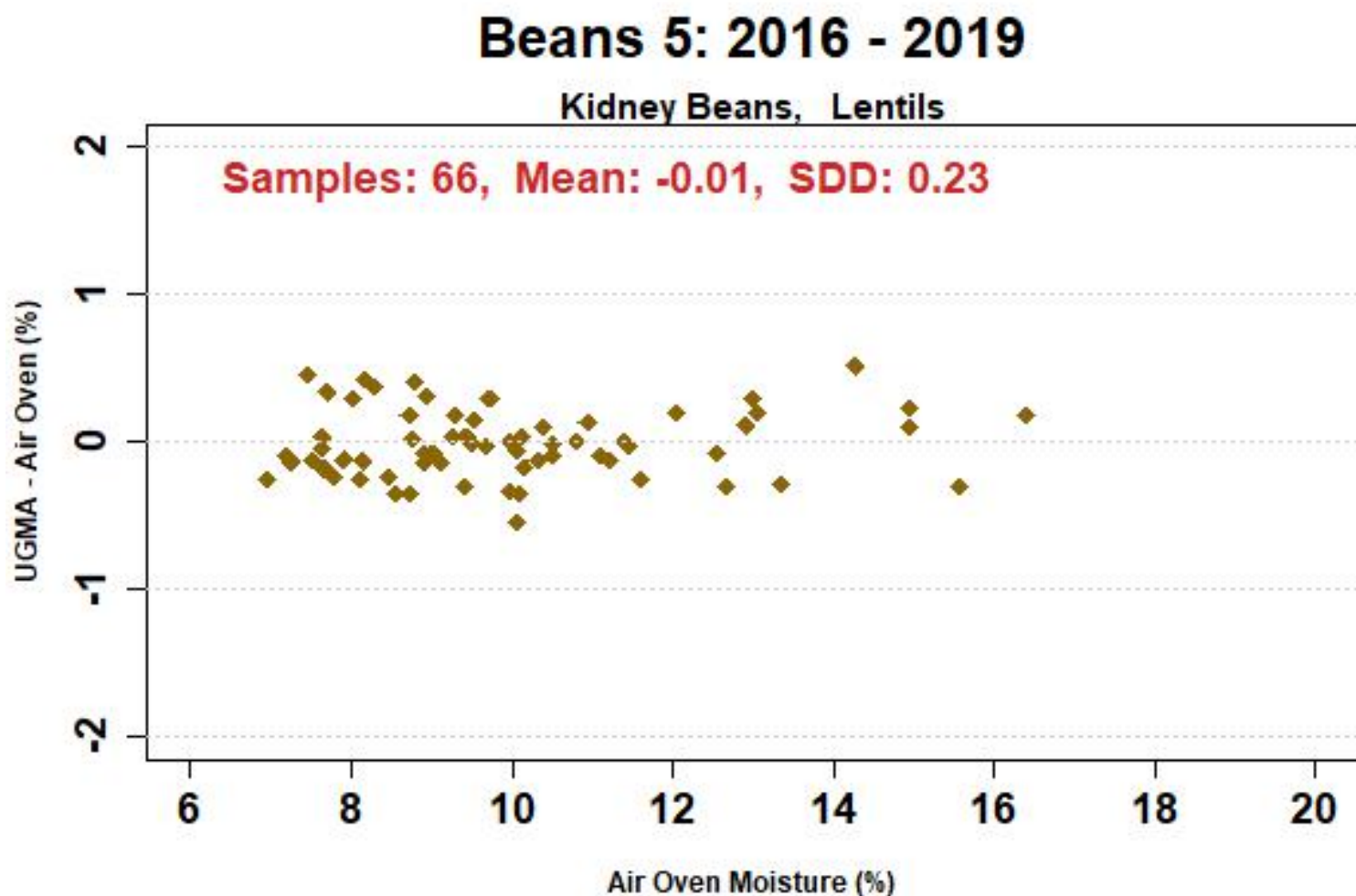
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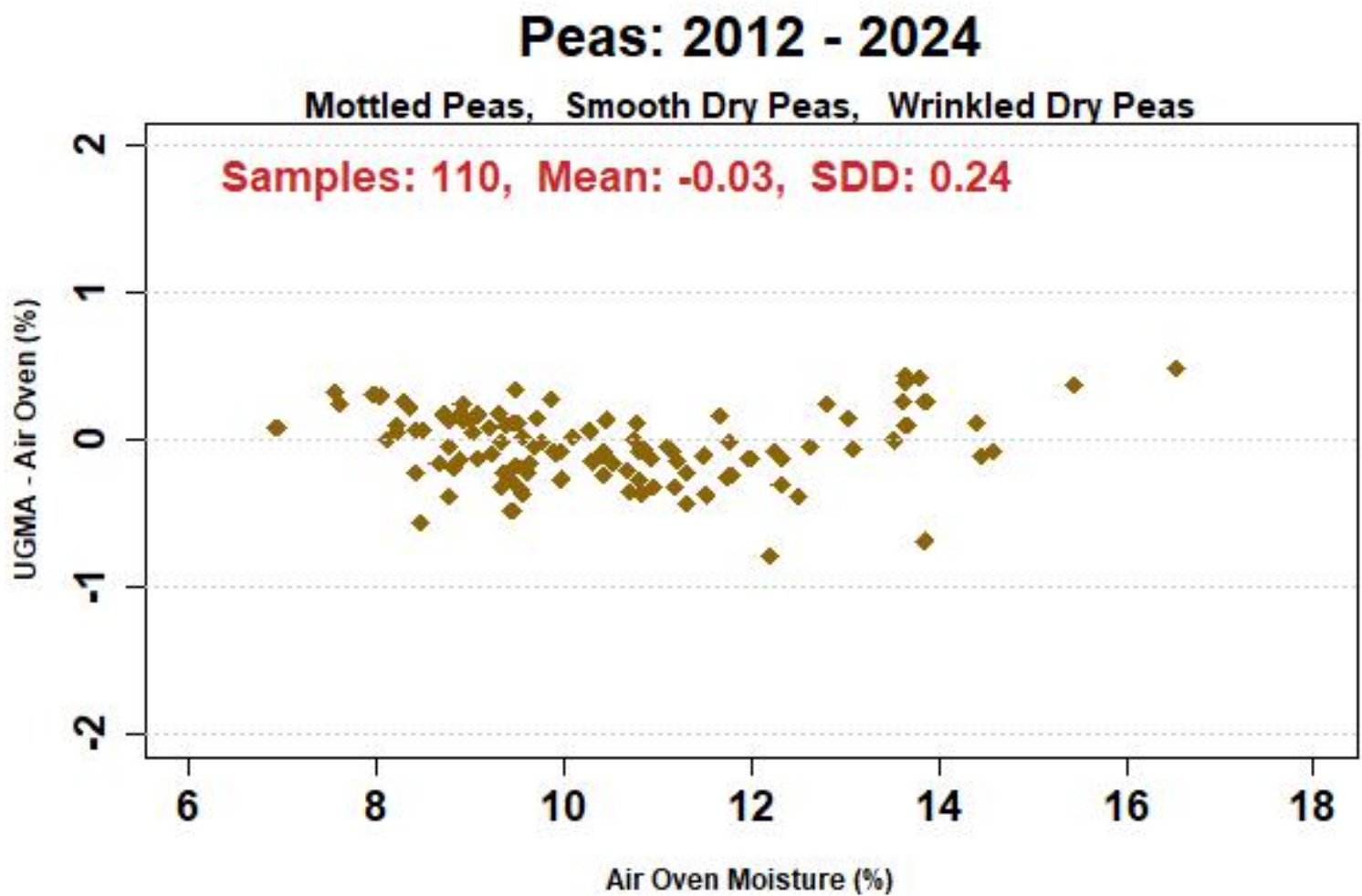
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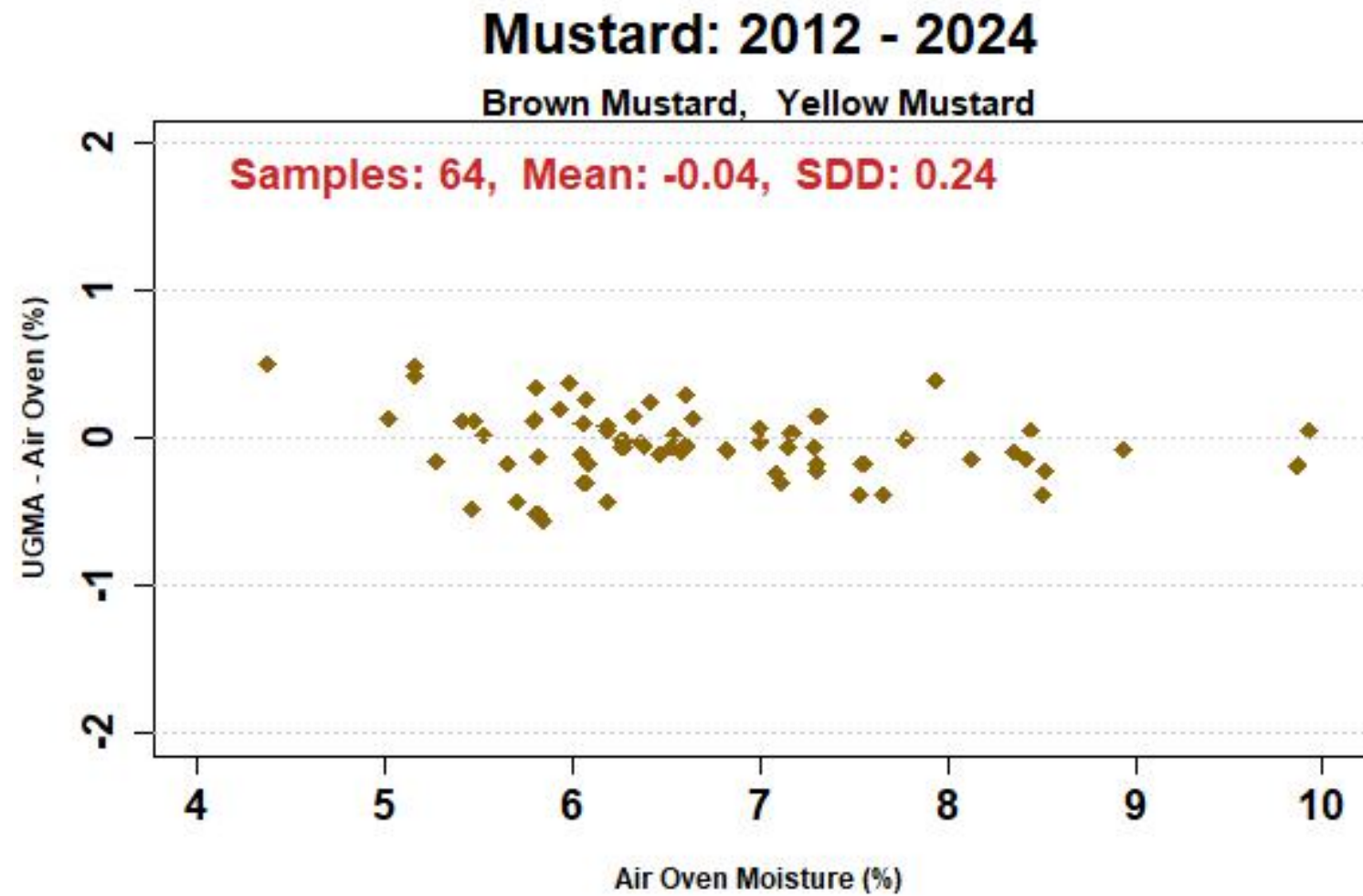
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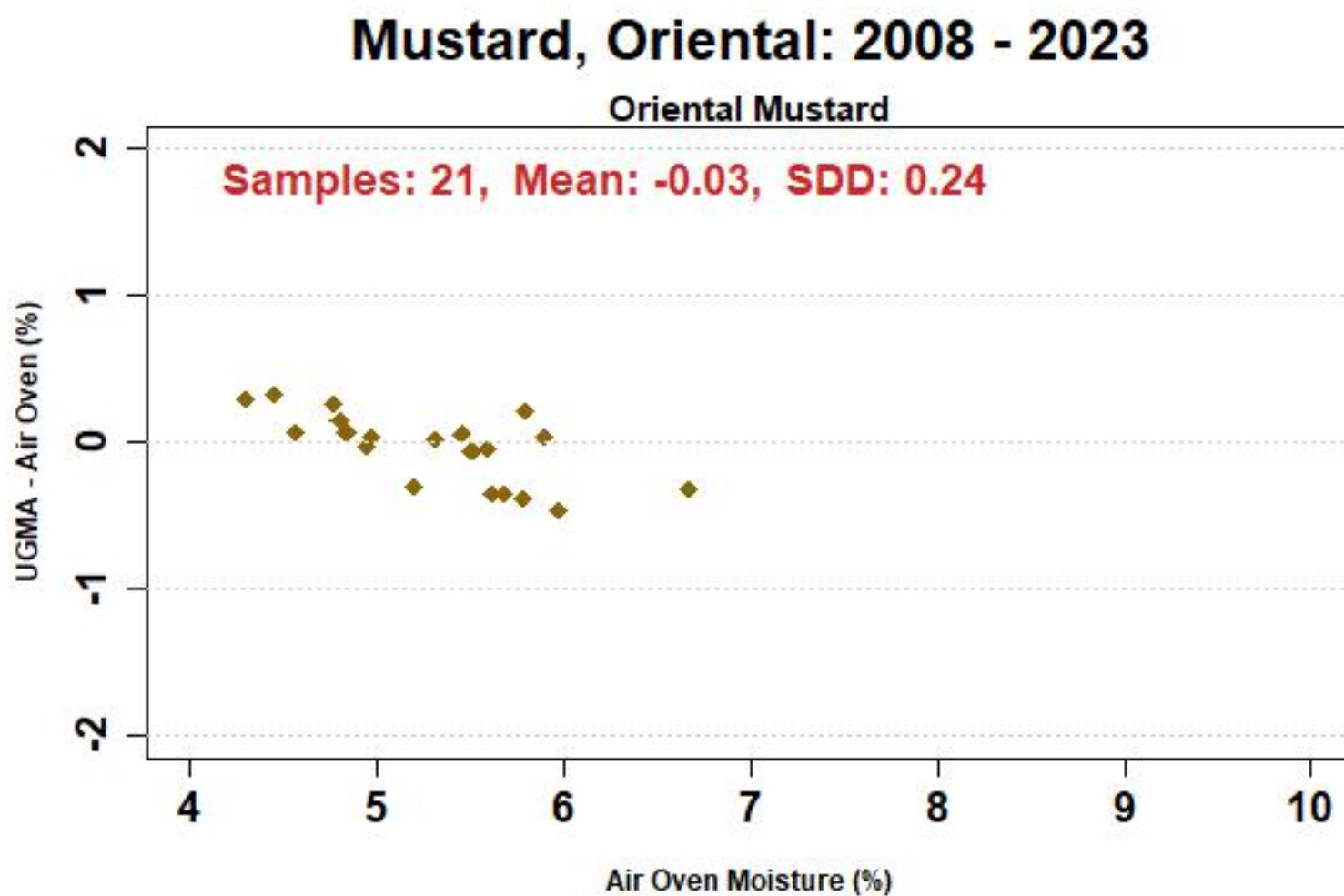
25. Peas Grain Group



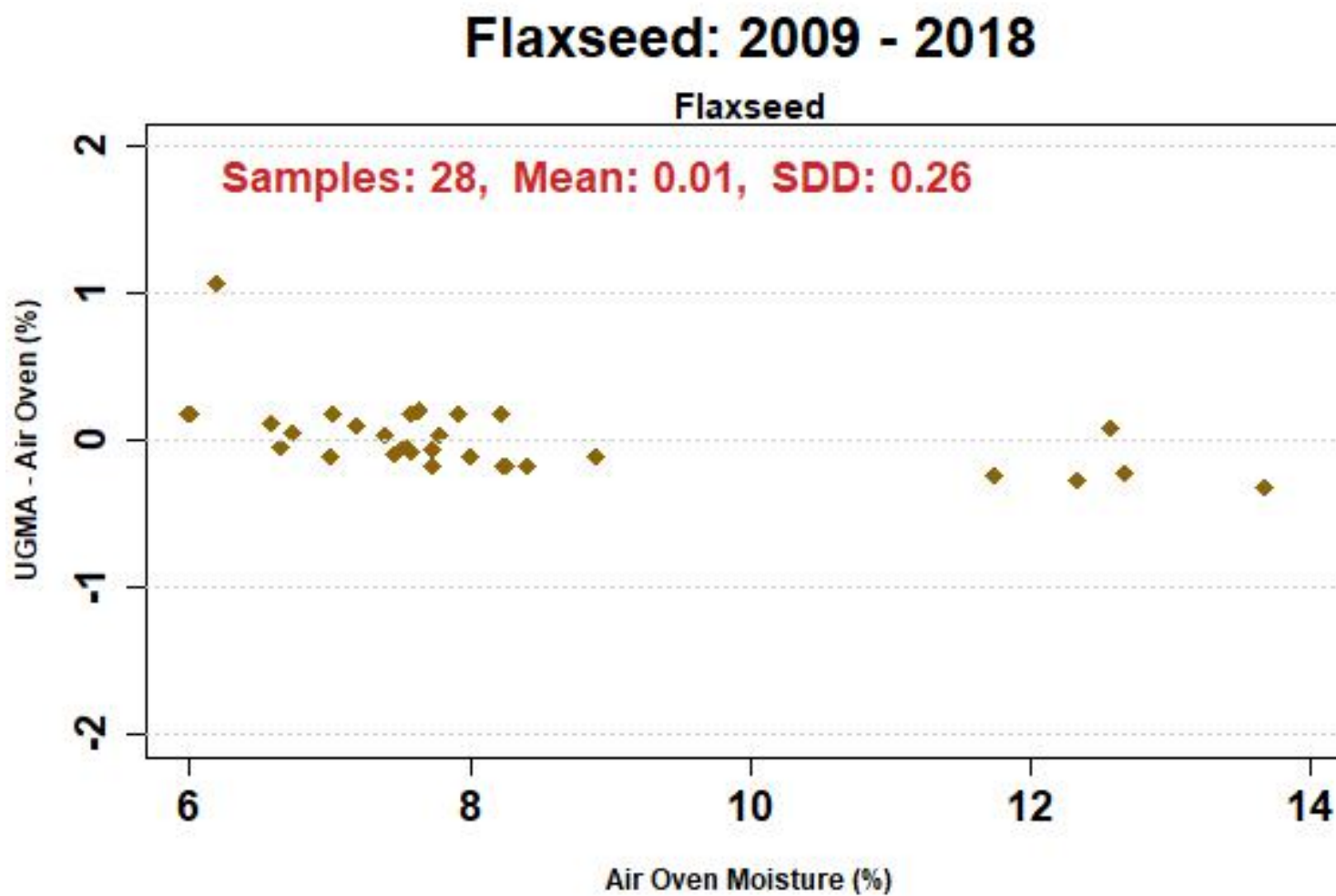
26. Mustard Grain Group



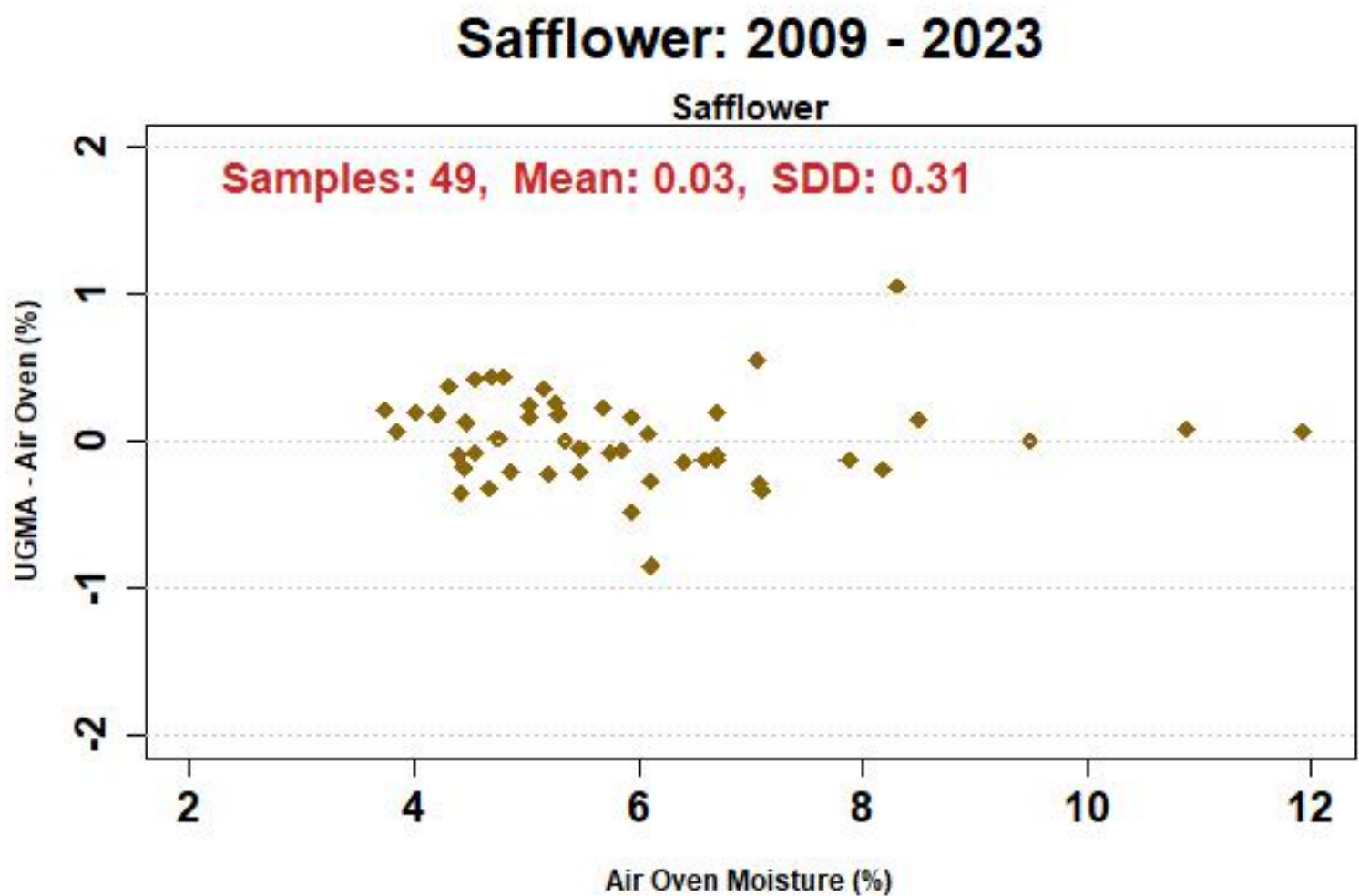
27. Oriental Mustard Grain Group



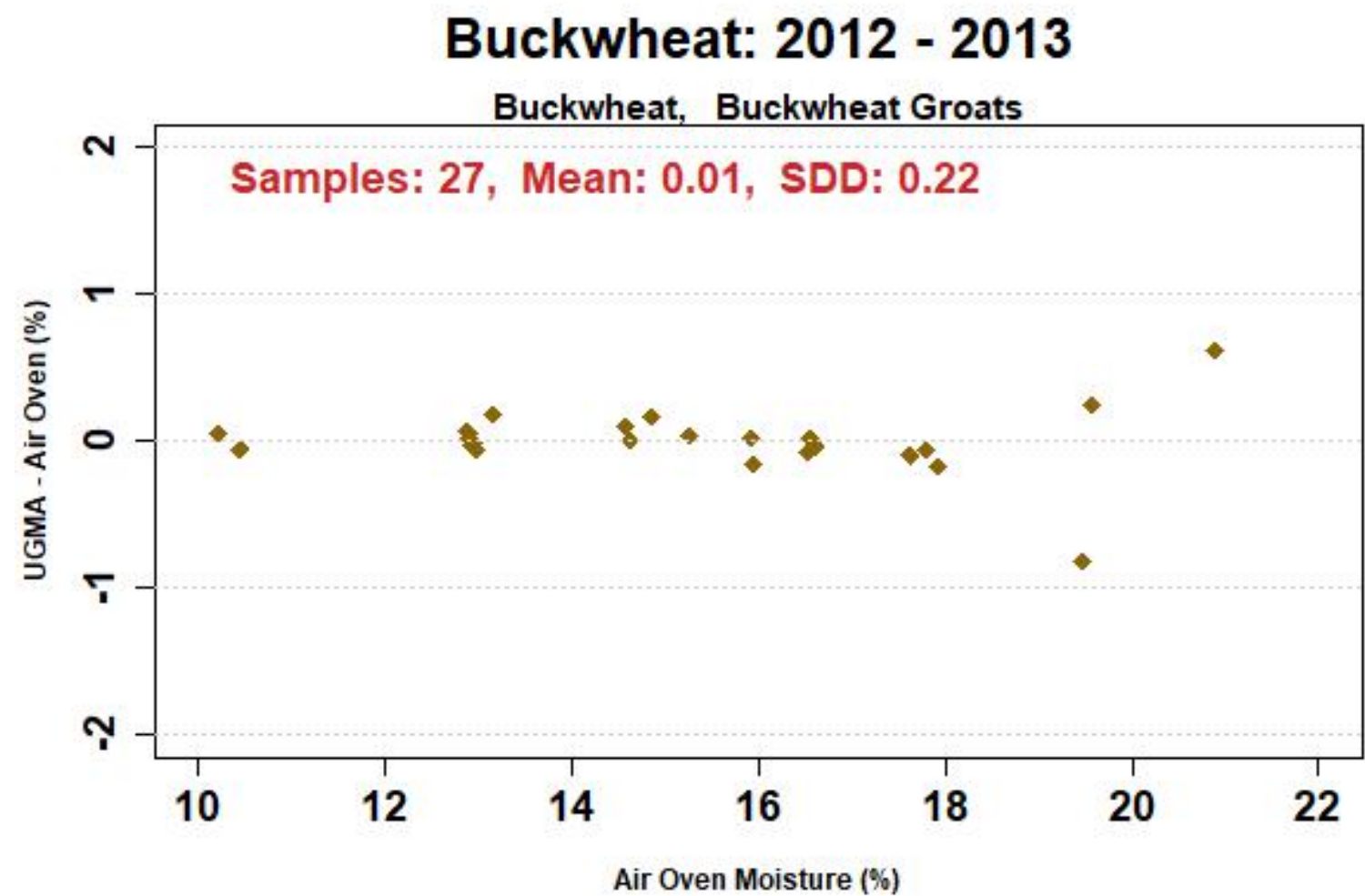
28. Flaxseed Grain Group



29. Safflower Grain Group



30. Buckwheat Grain Group



31. Popcorn Grain Group

