

Analysis of Gedeo Zone Wet Mills: Impact of Cherry Delivery on Cup Quality

USDA: FOOD FOR PROGRESS – REGROW YIRGA PROJECT

Funded by the US Department of Agriculture’s Food for Progress Program, JDE and Peet’s Coffee

The quality of coffee cherries is a critical factor in determining the final cup quality, which directly influences the market value and reputation of coffee. In the highly competitive coffee industry, processing only red ripe cherries is widely recognized as the best practice to achieve superior cup quality. However, the reality of cherry selection and harvesting is challenging, involving significant labor and precision.

During the 2023/24 Ethiopian coffee harvest season, a study was conducted to investigate the impact of coffee cherry delivery composition, specifically ripe, overripe, and immature cherries, on cup quality.

KEY FINDINGS

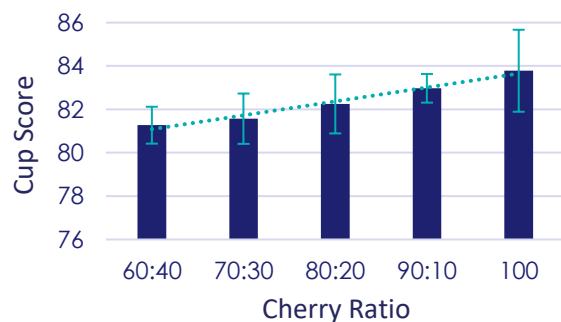
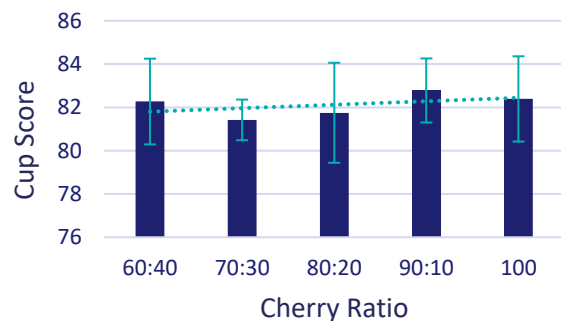
Low Elevation Sites (~1500 m.a.s.l.)

- Greater variability in cup scores due to higher instances of pest damage and lower overall cherry quality.
- A threshold of at least 80% ripe cherries is recommended to achieve noticeable quality improvements.
- Each 10% increase in ripe cherries resulted in approximately a 0.16-point increase in cup score based on trendlines equating to about a \$0.05/lb. increase per 10% increase in ripe cherry.

Mid-Elevation Sites (~1800 m.a.s.l.)

- A linear relationship was observed between the proportion of ripe cherries and cup scores.
- Each 10% increase in ripe cherries resulted in approximately a 0.64-point increase in cup scores based on trendlines equating to about a \$0.19/lb. increase per 10% increase in ripe cherry.

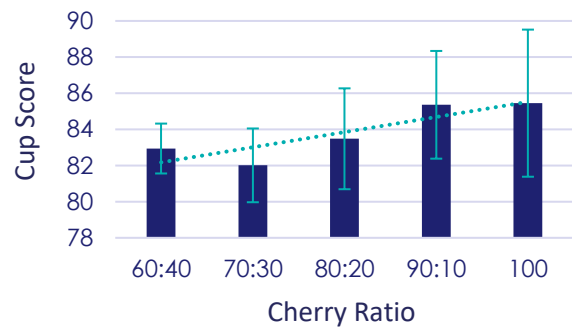
Note: Cherry Ratios depict ratio of Ripe Cherry : Reject Cherry (equal proportion of immature and overripe cherry).





High Elevation Sites (>2000 m.a.s.l.)

- Higher ratios of ripe cherries (90% and above) led to significant improvements in cup quality.
- Each 10% increase in ripe cherries resulted in approximately a 0.84-point increase in cup scores based on trendlines equating to about a \$0.25/lb. increase per 10% increase in ripe cherry.



Note: Cup score value was established via the 2024 Specialty Coffee Transaction Guide (Jan. 2025). We took the average value difference between 80 and 87.9-point coffee from 2024 dividing it by total point difference to assess a theoretical per-point value. **Establishing true coffee prices is far more nuanced. There are many factors that impact coffee prices. These values should not be considered absolute. They are provided to attempt to quantify the impact of cherry deliveries upon coffee value.** www.transactionguide.coffee

CONCLUSION

The quality of coffee cherries significantly affects the overall cup quality, with higher ratios of ripe cherries consistently leading to better cup scores across all sites. Our data suggests wet mills should implement stricter cherry selection criteria, tailored to their specific elevation, to enhance the quality and marketability of their coffee.