

# Rapid Test Methods for Biodiesel Analysis

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# Statement of Problem

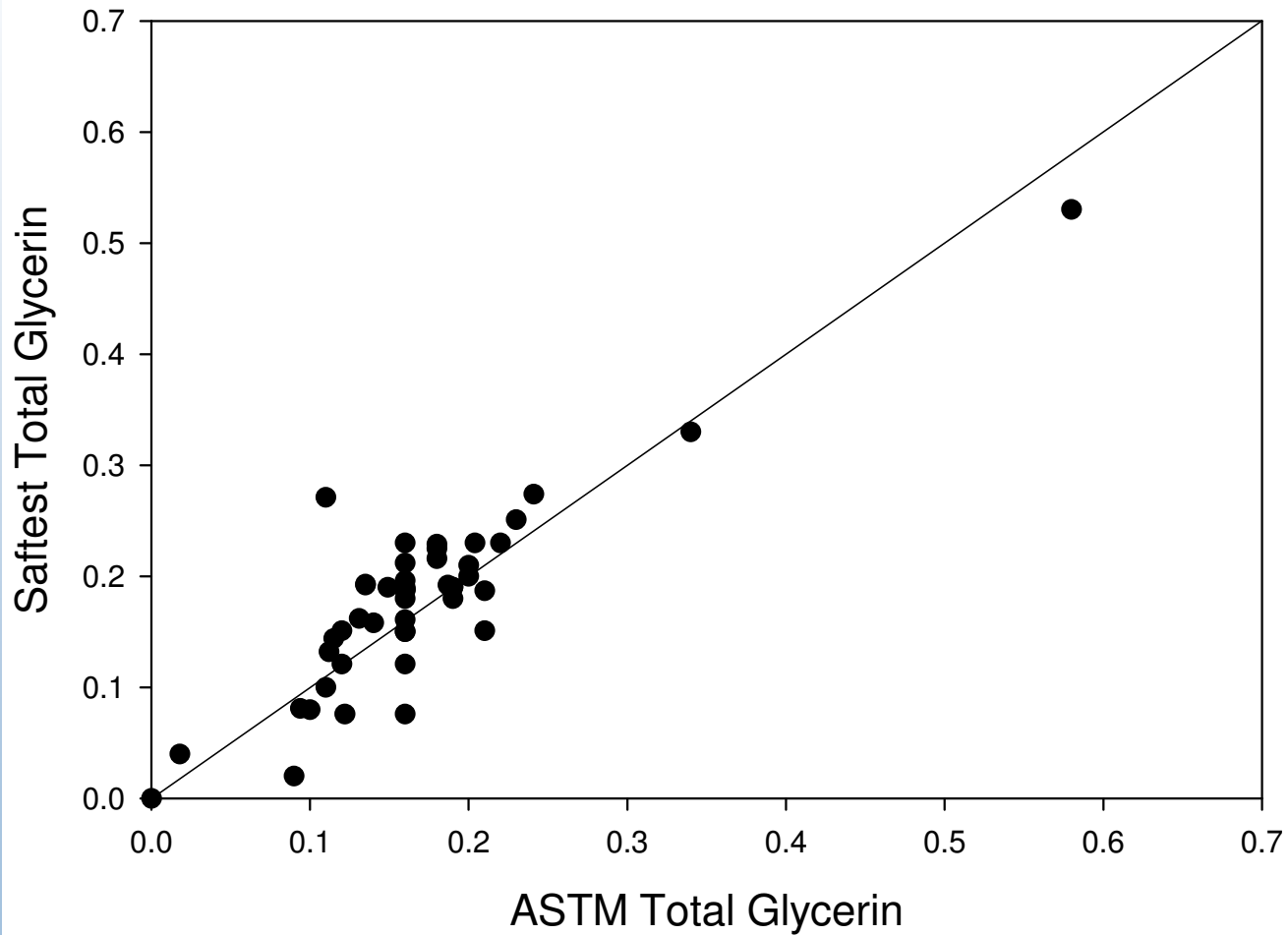
- Biodiesel quality is assessed with ASTM D6751
  - 16 properties are measured
- Do rapid methods exist for qualitative and quantitative testing?



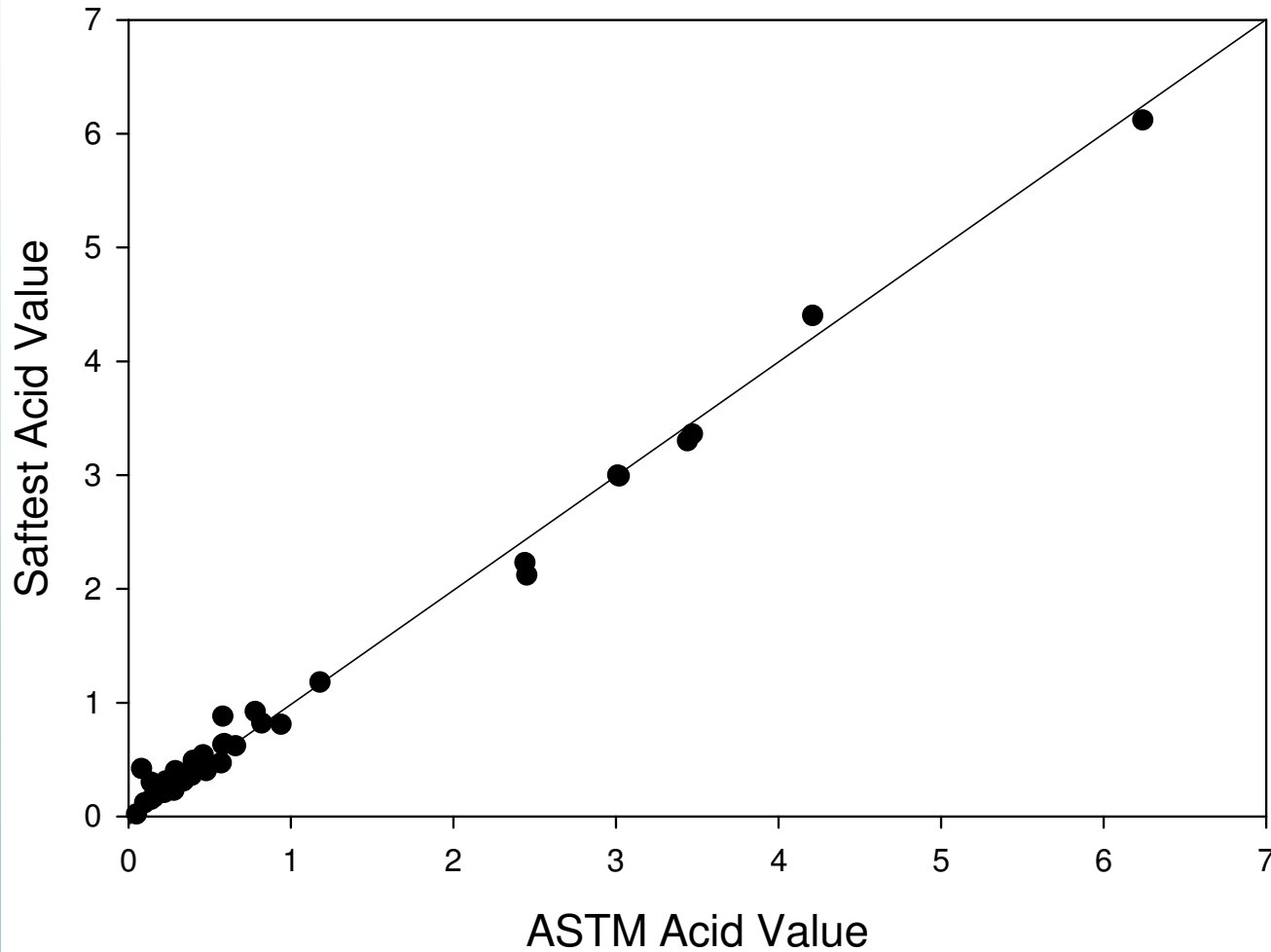
# SafTest by MP Biomedicals

- Quantitative tests for glycerin, peroxide, acid number, secondary degradation products
- UV/Vis detection, <150  $\mu\text{L}$  fuel, results within 20 minutes
- Insensitive to diesel fuel and feedstock
- Variability less than 5% within and between labs
- [www.mpbio.com](http://www.mpbio.com)

# Safteest and ASTM Total Glycerin



# Safest and ASTM Acid Value



# Conclusions

- Fuel quality is an important part of the continued growth of biodiesel industry
- Industry need for rapid testing
- NREL has tested successfully SafTest rapid test methods for biodiesel quality