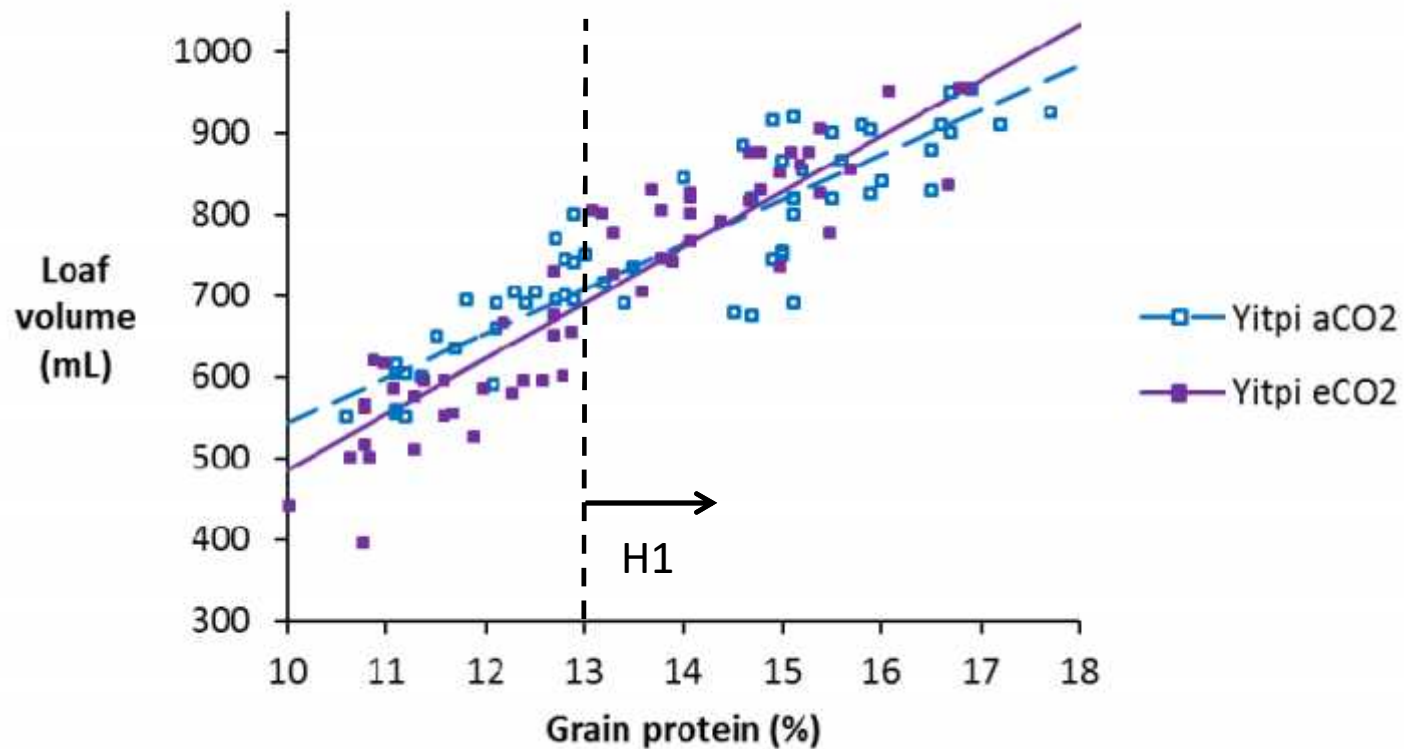


An empirical model of wheat baking quality under elevated CO₂



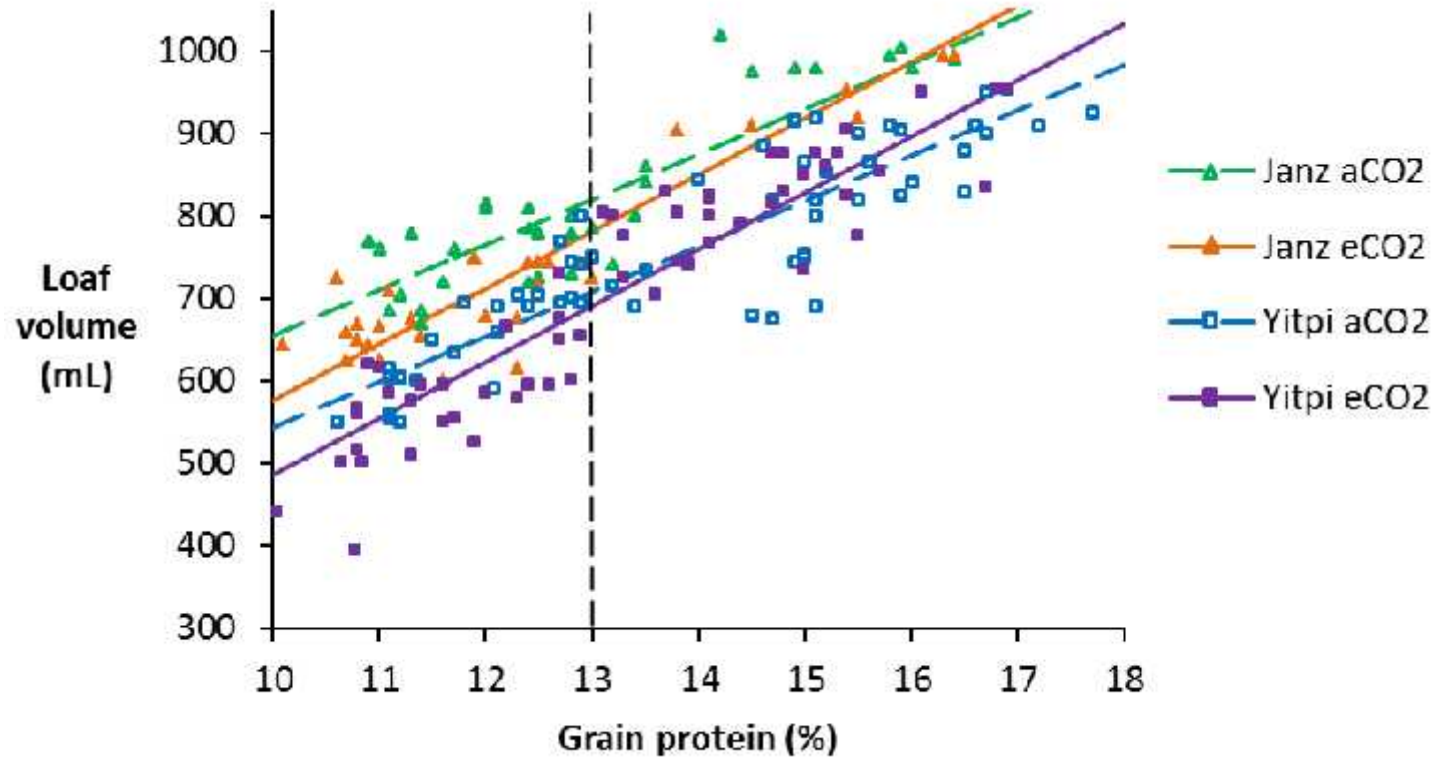
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Loaf volume vs grain protein: 5 years of FACE data



- Loaf volume related to grain protein, but steeper under elevated CO_2
- Fewer samples met the 13% min for the Australian Hard-Wheat (H1) classification under eCO_2

Loaf volume vs grain protein: Janz and Yitpi



- At a given protein concentration and CO₂ level cv. Janz achieved over 100 cm³ than cv. Yitpi
- Regression model explained 82% of variation in loaf volume
- Industry incentives needed before breeders will select for proteins more efficient at rising
- Mechanistic model of grain quality under development