

WHAT KIND OF PREDICTORS FOR CALIBRATING THE PIG CLASSIFICATION METHODS ?

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CONCLUSIONS

- Cold linear measurements are more accurate than warm linear measurements for predicting the lean meat proportion.
- Removing the backfat has given an adjusted R^2 of 0.62. Adding the weights of the joints has increased the adj. R^2 to 0.80.
- Continuing the dissection with removing of the whole subcutaneous fat has increased the adj. R^2 to 0.93 for an RSD of 0.90. The gain in accuracy is too small by deboning (adj. $R^2 = 0.96$ and RSD = 0.66).
- For hoping a good accuracy (RSD close to 1) informations about subcutaneous fat of the 4 main joints are essential. Additional informations about the internal layers of the belly should be useful.
- MRI (Magnetic Resonance Imaging) could be a powerful technique for this kind of investigations. It will be used in the european project EUPIGCLASS about standardisation of the pig classification methods.

INTRODUCTION

Some countries use surrogate predictors for assessing pig classification methods. The french reference method (RMSE = 1.67) is more accurate than all the classification devices used today. But a slight improvement in accuracy and a change in the nature of the measurements on line are expected.

AIMS

- General aim : To build a more accurate reference method for calibrating the pig classification methods in France.
- Specific aim : To study the gain in accuracy for predicting the lean meat proportion when including linear measurements, joints weights and tissue weights.

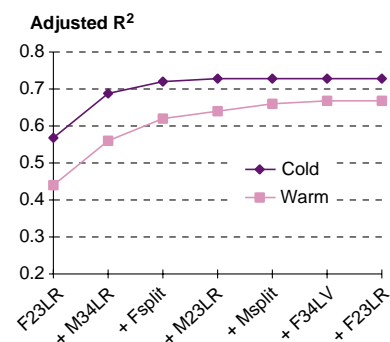
METHODS

- Sampling design : 320 carcasses, 5 slaughterhouses, 4 genetic groups, 2 sexes.
- Protocol : linear measurements, breton cutting on the right side and european dissection on left side.

RESULTS

Comparison of accuracy

between cold and warm measurements



between various predictors

