



## French corn – Harvest 2020 : Quality for animal feed

**Justine DANEL**  
*ARVALIS - Institut du végétal*



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## French crop quality survey FranceAgriMer / ARVALIS


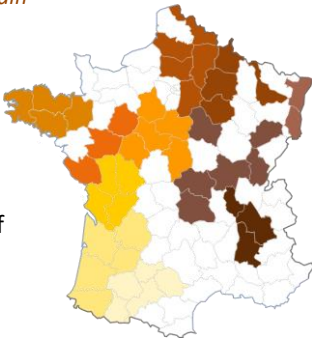
Quality Survey is conducted by FranceAgriMer and ARVALIS - Institut du végétal, with the support of Intercéréales to provide information on the quality of the cereals collected in silos

*For animal feed :*                      *Soft wheat, Barley, Triticale,  
Maize grain, Sorghum grain*

In 2020 : 245 samples of **maize grain** collected by storage companies and cooperatives from 46 departments :

- from silos at completion of drying
- global sample representative of 75-80% of dried maize.

⇒ 11 sample mixes by production area



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## French crop quality survey FranceAgriMer / ARVALIS

Analyses performed on maize:

- On 245 samples:
  - Rapid analyses by NIR :
    - Moisture,
    - Proteins,
    - Starch,
    - Fat
- On 11 mixes by production area:
  - Rapid analyses by NIR (Moisture, Proteins, Starch, Fat)
  - Physico – chemical analyses :
    - Ash,
    - Fat (after hydrolysis),
    - Sugar,
    - Crude fibre,
    - NDF,
    - Water-insolubles cell walls,
    - Gross energy,
    - Promatest (indicator of the thermal shock suffered by the grain during drying)

Results on Dry Matter (DM) to facilitate comparison

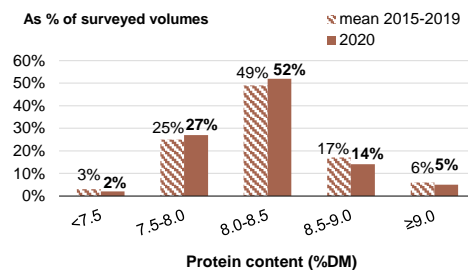


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## French Maize Quality – Harvest 2020 *Protein*

National mean 2020: 8.2%DM

- By production areas, values range from 7.9 to 9.0%DM
- 71% of samples with proteins content up to 8.0%DM and 19% up to 8.5%DM.

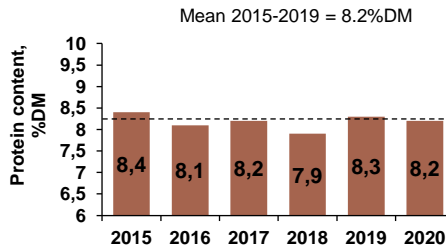


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## French Maize Quality – Harvest 2020 *Protein*

2020 compared to previous years:

- Similar to 2019 and to the five-year mean
- Relatively homogeneous values in the last 6 years

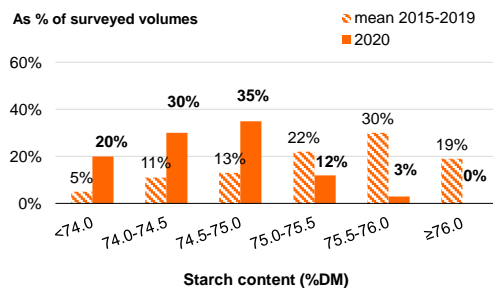


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## French Maize Quality – Harvest 2020 *Starch*

National mean 2020: 74.4%DM

- By production areas, values range from 73.4 to 74.9%DM.
- 80% of samples with a starch content up to 74%DM.

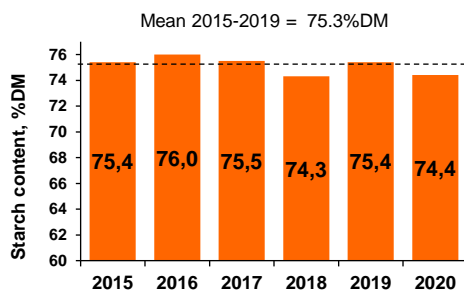


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## French Maize Quality – Harvest 2020 *Starch*

2020 compared to previous years:

- 1.0 point less than in 2019
- 0.9 point less than the 5-year mean

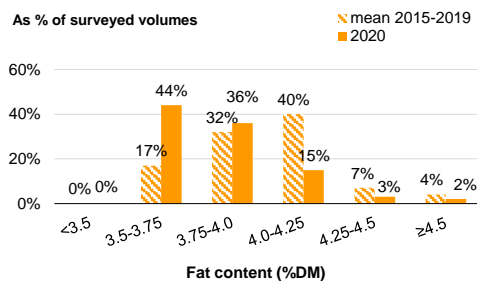


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## French Maize Quality – Harvest 2020 *Fat*

National mean 2020: 3.8%DM

- The values range from 3.6 to 4.2%DM.



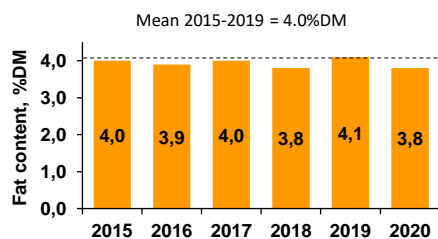
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## French Maize Quality – Harvest 2020

### Fat

2020 compared to previous years:

- Value slightly lower than in 2019 and the 5-year mean (respectively 4.1 and 4.0%DM).



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## French Maize Quality – Harvest 2020

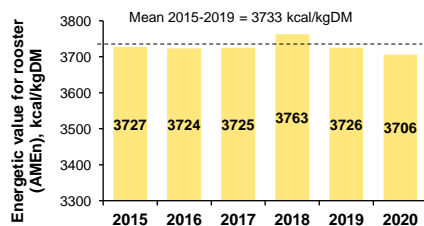
### Energetic value for rooster

Energetic value for rooster (AMEn) estimated by the equation of Barrier-Guillot *et al.* (2001) :

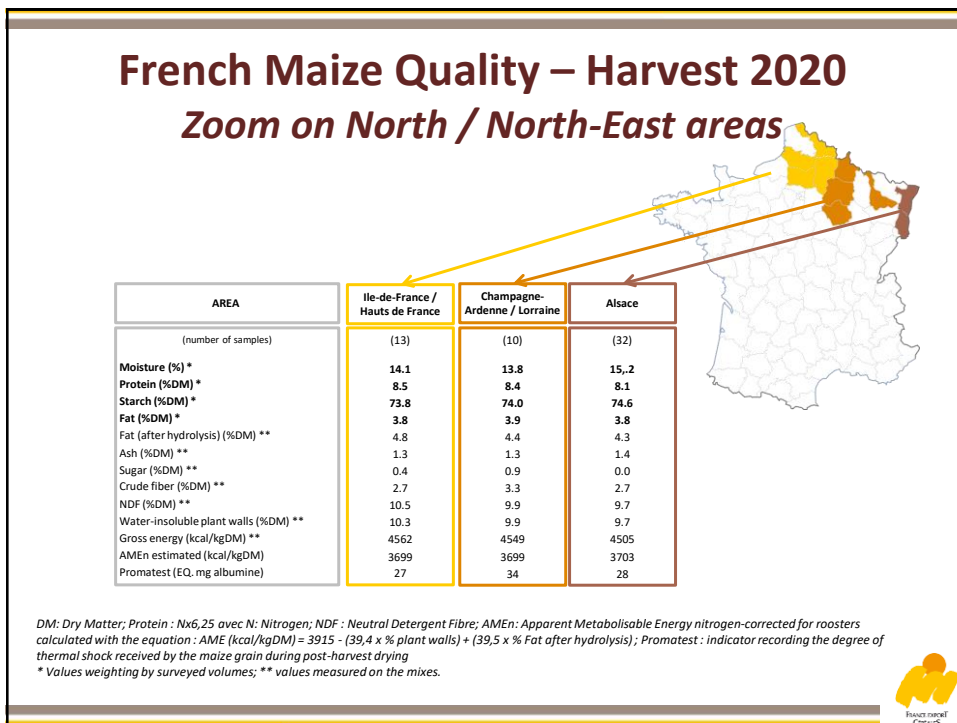
$$AMEn \text{ (kcal/kgDM)} = 3915 - (39,4 \times \% \text{ plant walls}) + (39,5 \times \% \text{ fat (after hydrolysis)})$$

National mean 2020 : 3706 kcal/kgDM

- The values range from 3679 to 3718 kcal/kgDM



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## Thank you for your attention



**Justine DANEL**  
ARVALIS - Institut du végétal



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