



**Terres
Univia**

l'Interprofession des huiles et protéines végétales

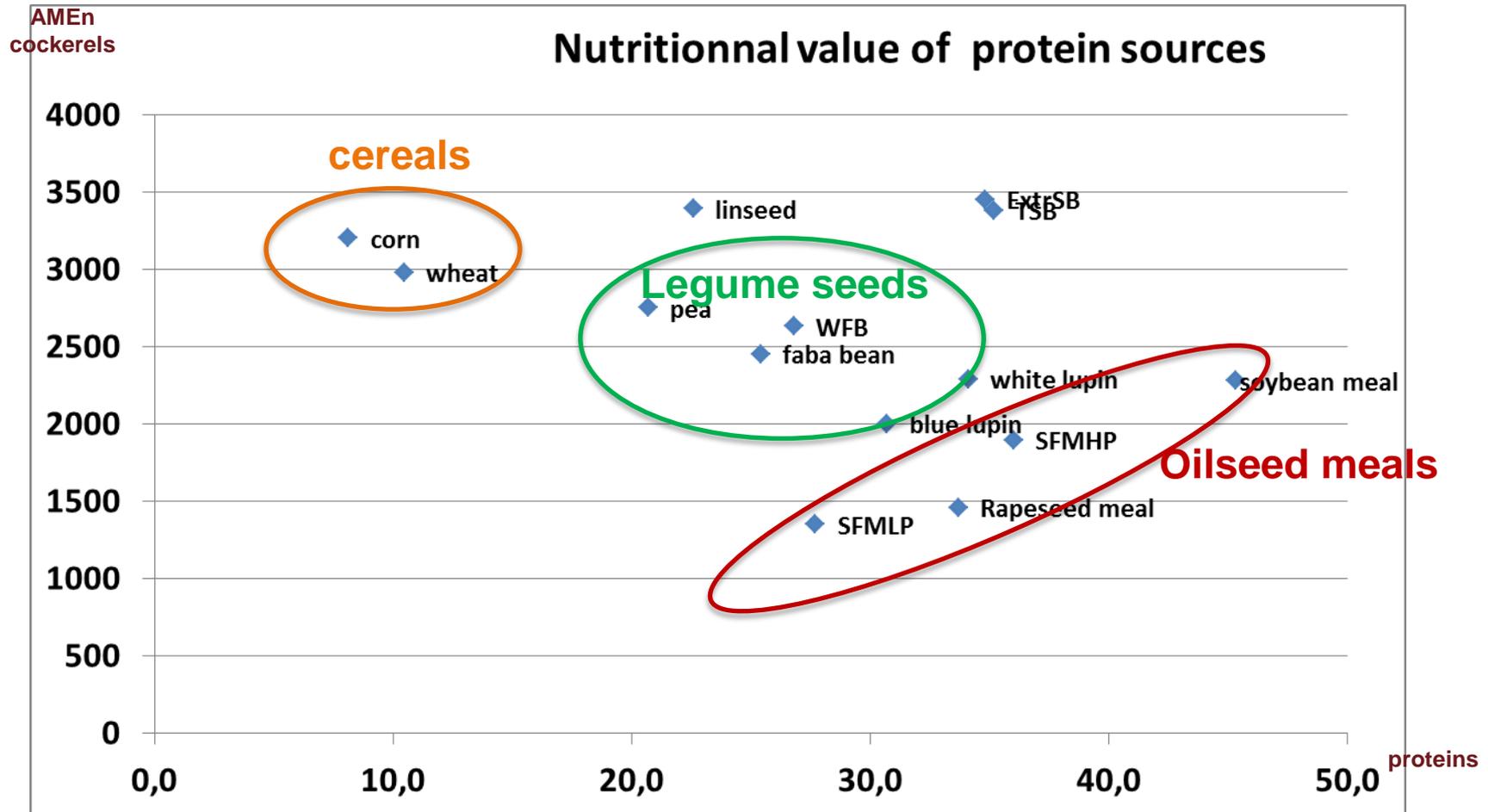
New opportunities on feed for EU protein crops

Corinne Peyronnet 11-07-2018

New opportunities on feed for EU protein crops

- 1. Feed context: sources, protein deficit, GMO Free demand and protein sources for animal sectors**
- 2. What about ruminants?**
- 3. What about monogastrics? And other species?**
- 4. To conclude**

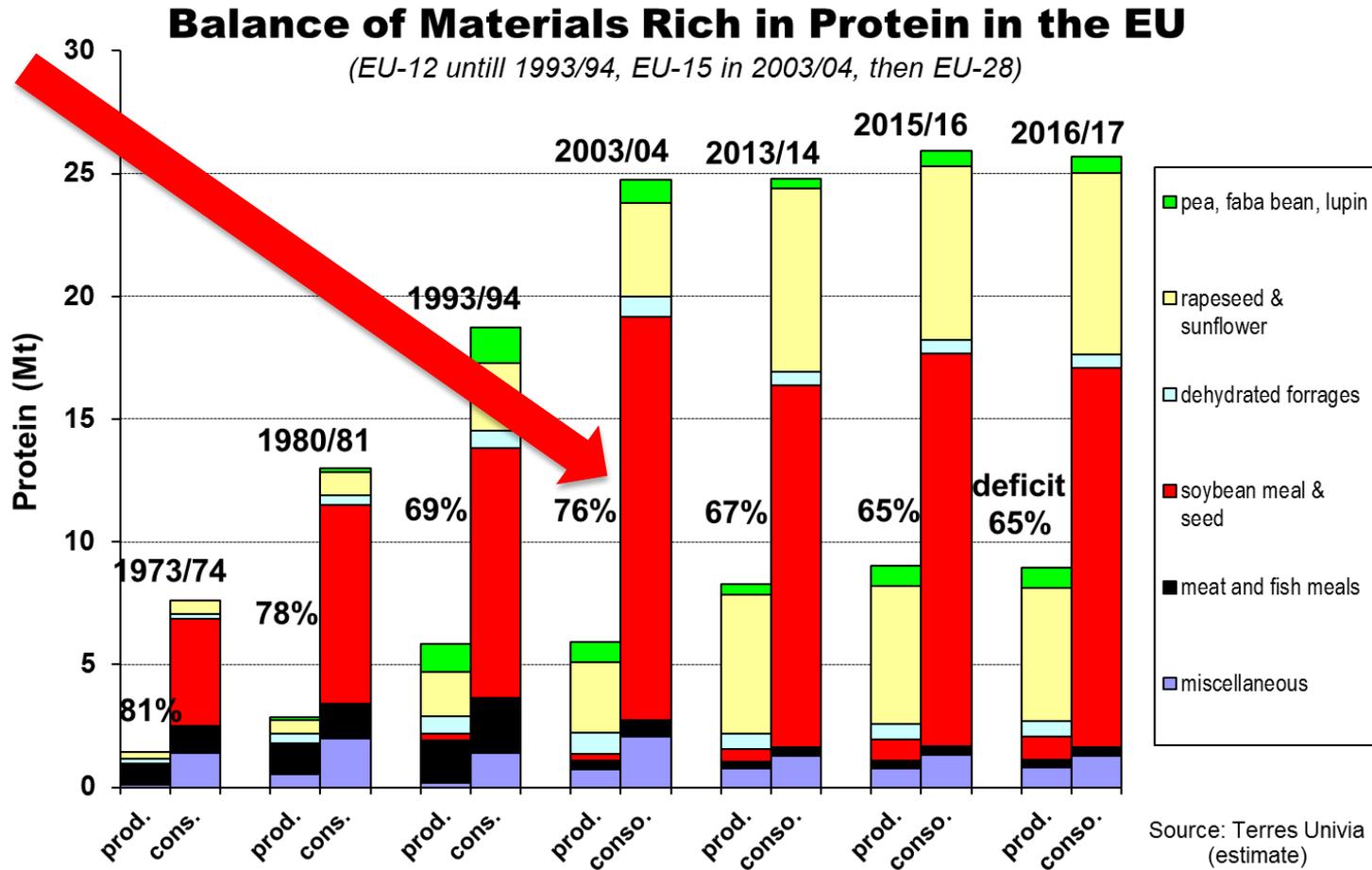
1.Feed context: EU protein sources



From INRA, FEEDIPEDIA

1. Feed context: large deficit of **protein rich** (>15%) feedstuff in EU

Soybean meal

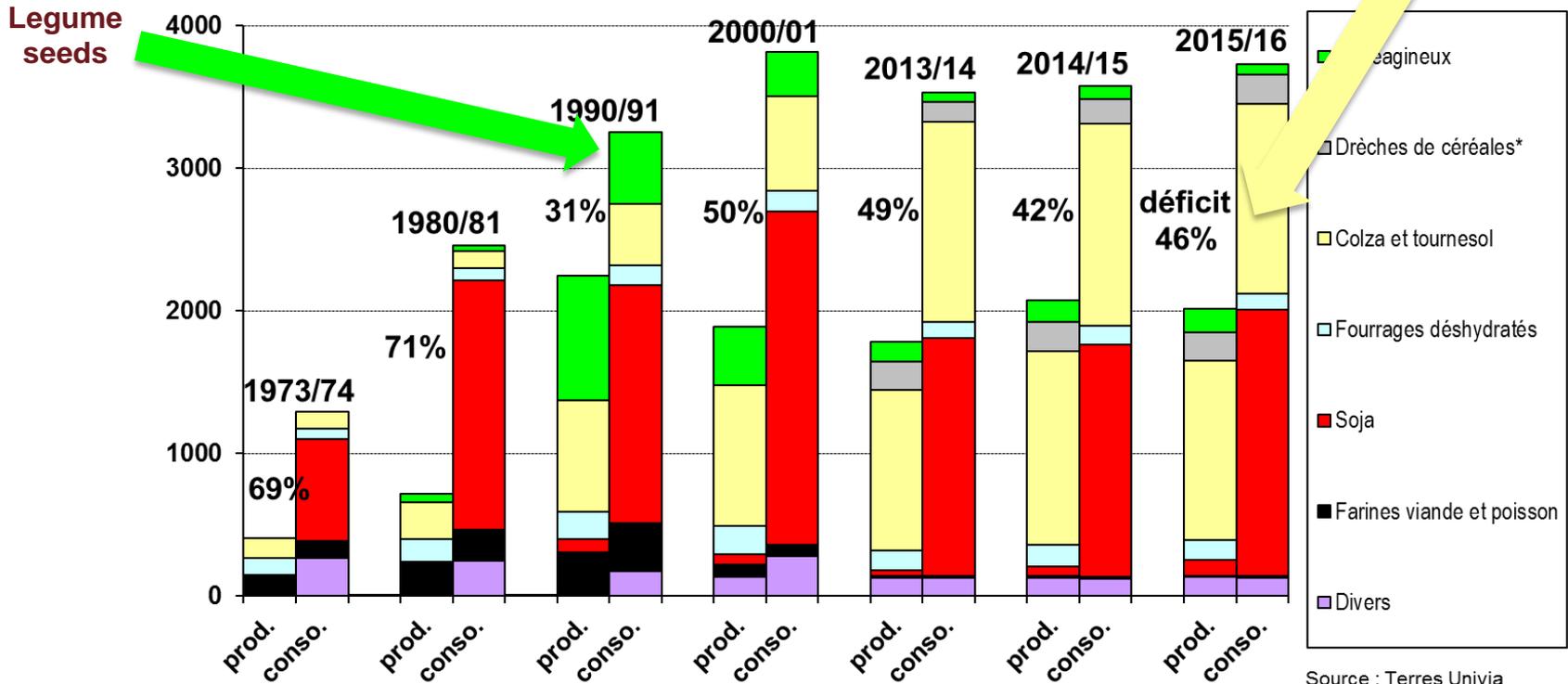


1. Feed context: lower deficit of protein rich feedstuff in France

France : Bilan des Matières Riches en Protéines

Rape and sunflower meals

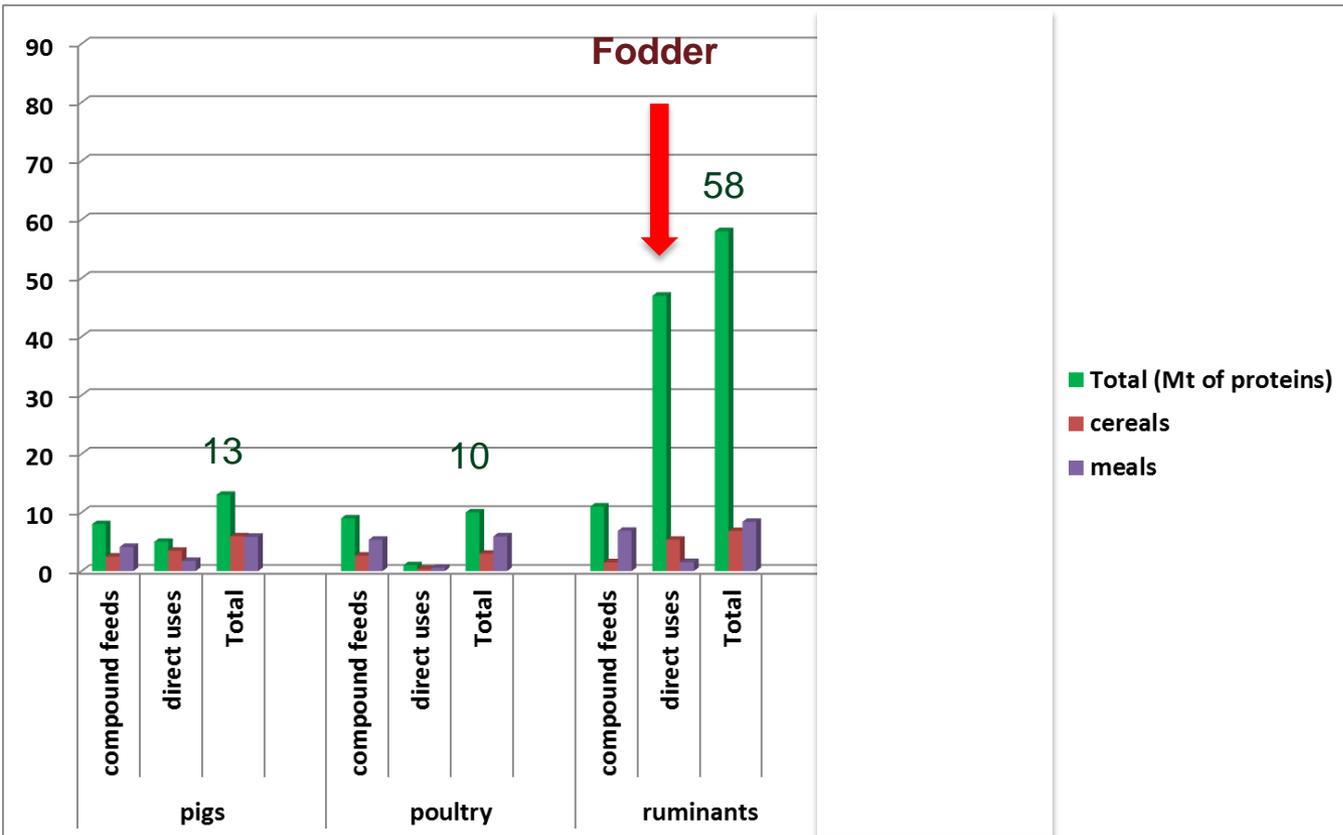
Protéines (1000 t) (> 15 % protéines) en alimentation animale



* données non disponibles avant 2009/10

1. Protein sources for animal sectors in UE

Protein consumption by the different animal sectors (Mt proteins in 2011)



Estimates:

- 81 Mt vegetable protein/year for 11 Mt of animal protein production
- ruminants are the first users of proteins from cereals and meals before pigs and poultry
- about 50% of the total proteins come from fodder (39 Mt whose ½ from permanent grasslands)
- 16 Mt from cereals
- 20 Mt from meals

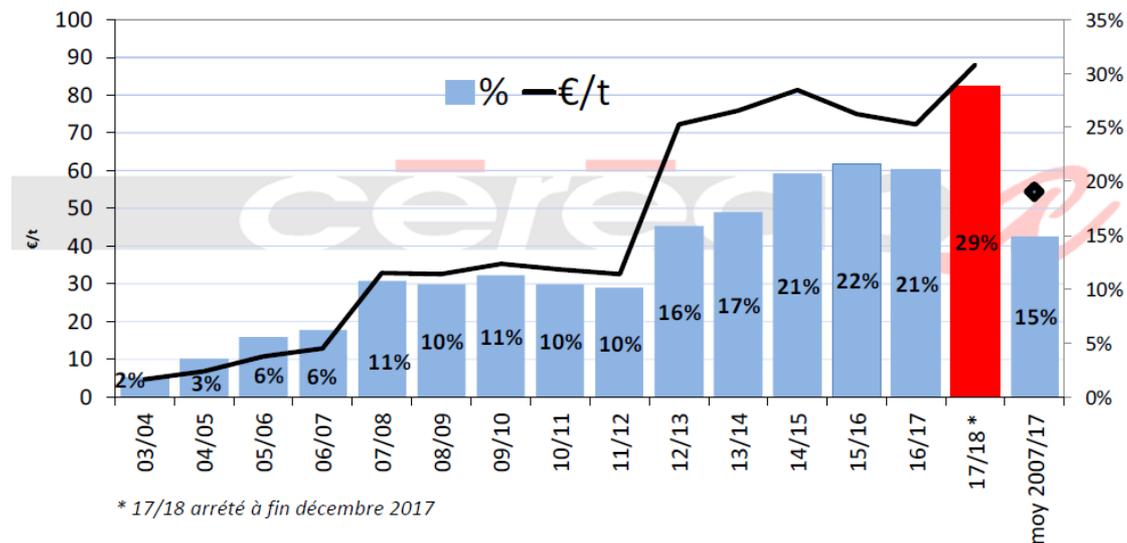
Sources : Estimates with FAO, EUROSTAT, FEFAC, FEDIOL et Oil World data (by Y. Dronne INRA)

1. Feed context: increase in demand for GMO free, local, traceable, sustainable... feed from consumers

- Increase of animal feed specifications in particular for milk, eggs, poultry meat and beef
- Increase of GMO free premium for soybean meal (80€/t stabilized since 2014)



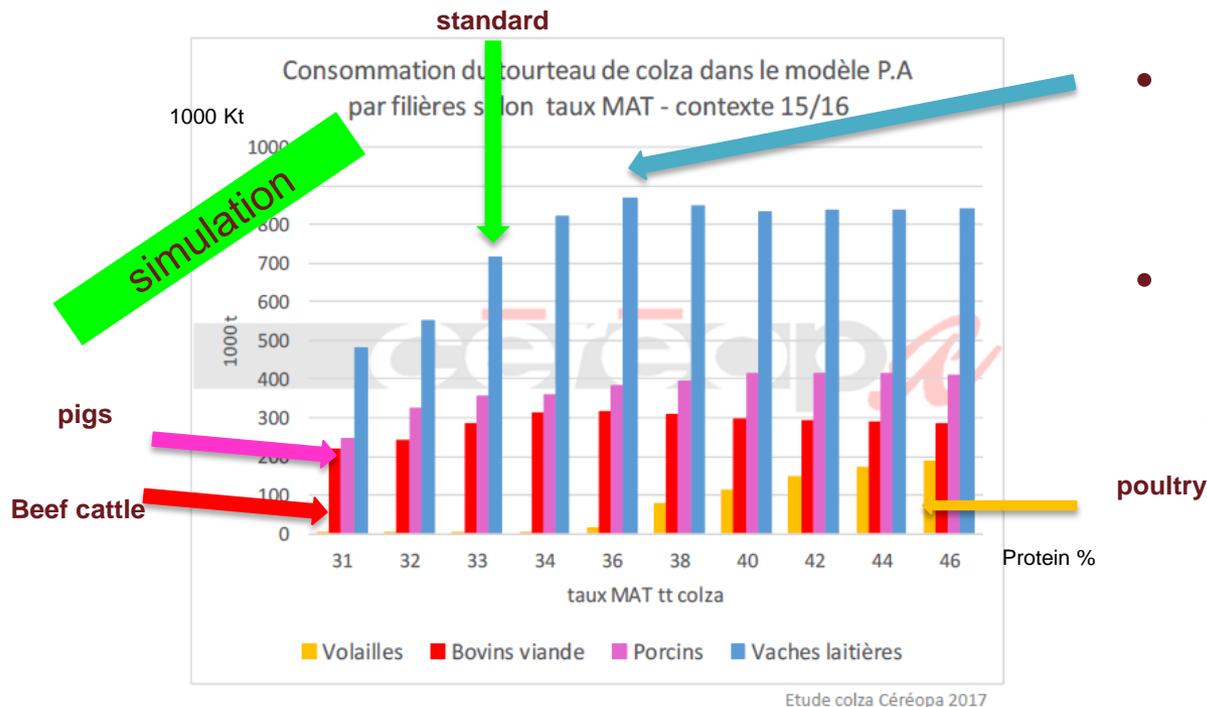
TOURTEAU DE SOJA 48% DELIVRE MONTOIR PRIME "non ogm"/STANDARD



From Céréopa 2018

2. What about ruminants?

- Increase the use of protein rich fodder such as forage legumes (alfalafa, clovers...) to reduce the need of nitrogen concentrates?
- Increase of UE rapeseed and sunflower meals consumption in substitution to imported meals (soybean and sunflower)?
- Improvement of protein content of meals (with a decrease of fiber content) obtained with plant breeding and processes such as dehulling, blutage...



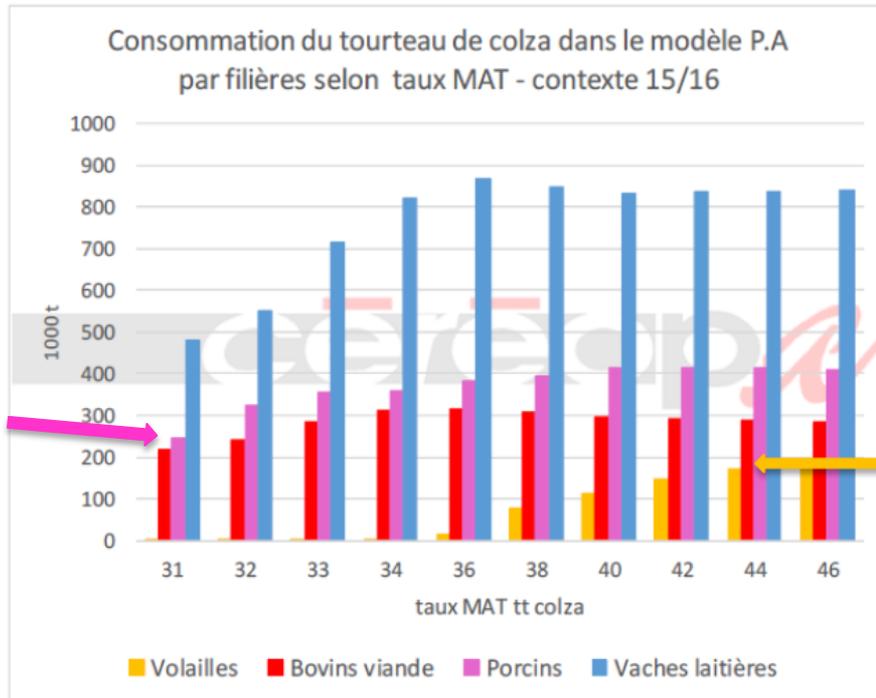
- Dairy cows are the main users of rapeseed meal
- Optimum level at 36% of protein content

Campaign 15/16 (€/t)
 Corn: 151
 Soybean meal: 347
 Rapeseed meal: 216
 Soy/Corn: 2.3
 Rape/Soy: 0.62

Variation of rapeseed meal consumption with variation of protein content
 (French model for compound feed during campaign 2015/16, Céréopa 2017)

3. What about monogastrics?

- Feed industry needs more and more efficient and sustainable feedstuff to reduce conversion rates and then environmental losses. That supposes good quality protein sources, well balanced in essential amino-acids and highly digestible.
- The improvement of protein content can increase inclusion levels in diets. Example of rapeseed meal wich becomes more multifunctional.



Etude colza Céréopa 2017

- Poultry are the main users of soybean meal
- For poultry, the optimum level is 46% of protein content

Variation of rapeseed meal consumption with variation of protein content

3. What about monogastrics?

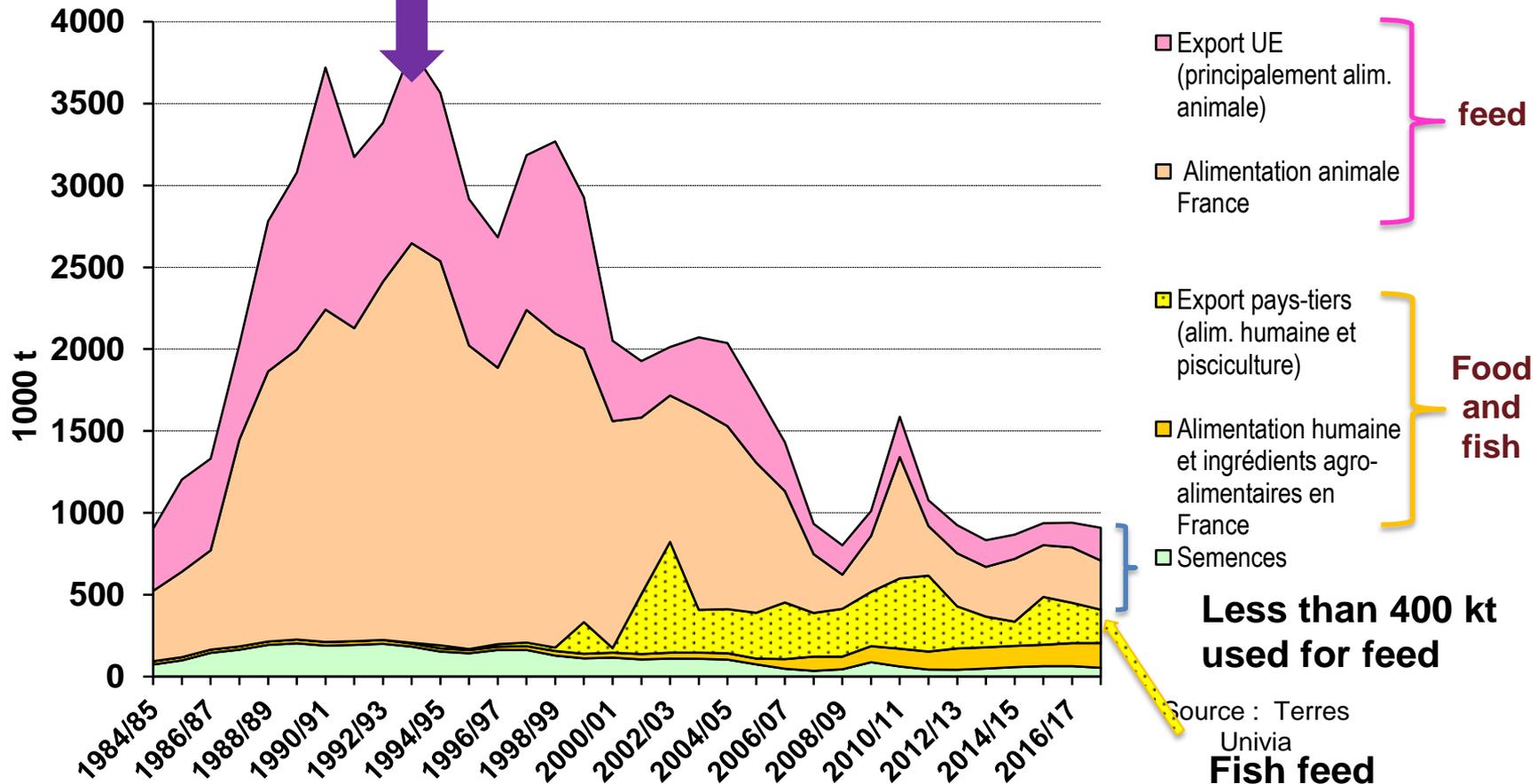
Historical review: The first market of legume seeds in France was for feed

More than 10% of raw materials used for compound feed during 90's

2.3 Mt for feed



Uses of French peas and faba beans production since 1984



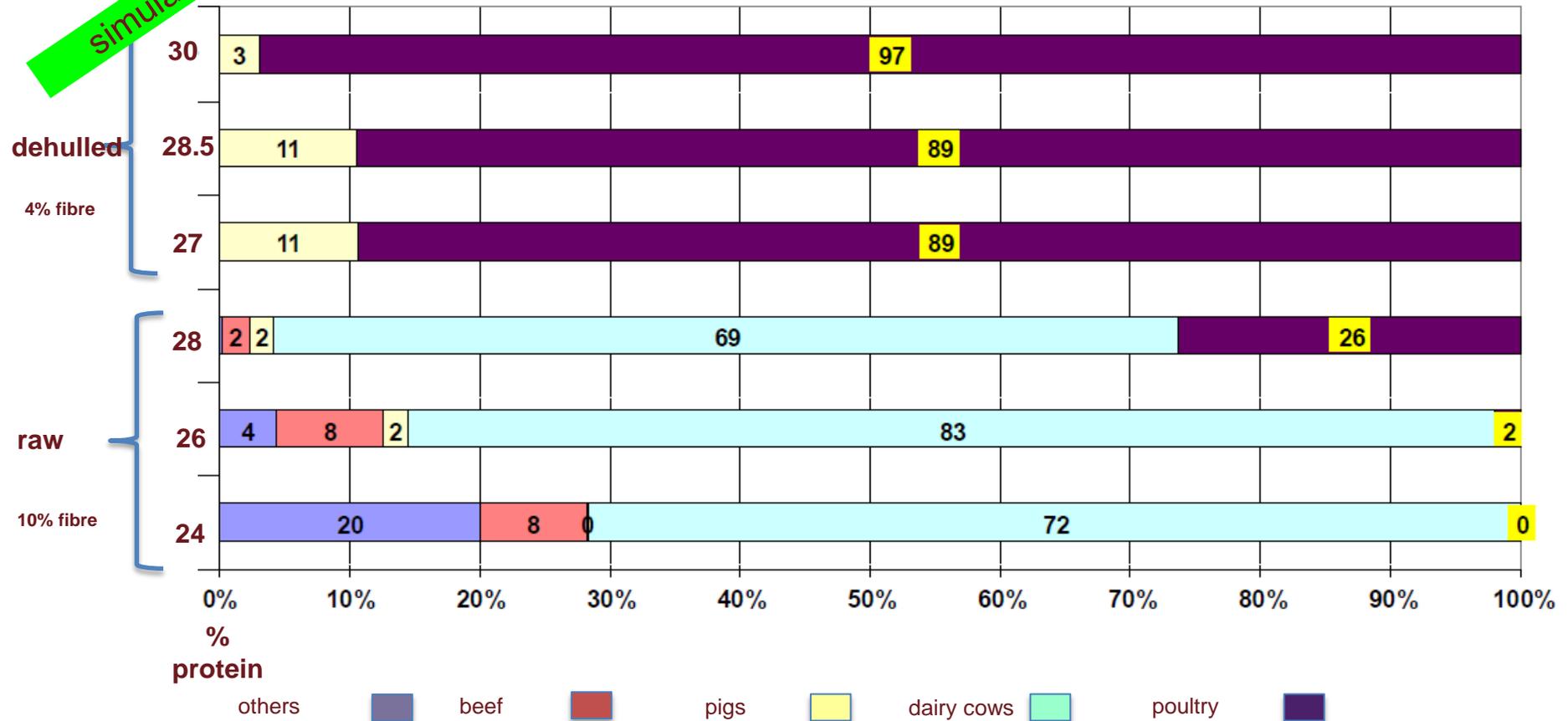
Source : Terres Univia
Fish feed

3. New opportunities to meet local, GMO free and high quality demand?

- More dehulled sunflower meals (High Pro) multifunctional
- Local soybean expeller meal for local GMO free demand
- Dehulled faba beans for poultry and fish
(added value due to dehulling process: from 35 to 90€ / ton with the protein/energy cost)

3. Uses of varying protein and fibre contents of faba beans: specific interest for poultry

simulation

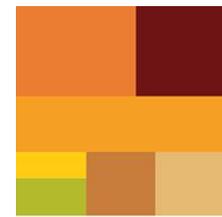


3 varieties from 24 to 28% of protein content

Céréopa 2016

4. To conclude...

- Large diversity of protein sources in UE, well adapted to the different areas.
- Increase in GMO free and local demand for animal sectors by consumers.
- Both oilseed meals and legume seeds are quality and traceable sources of protein for feed able to improve protein independence.
- Research for plant breeding and innovation in technological processes are necessary to improve yield, quality, sustainability and adaptability of these plant protein crops.
- UE protein crops can answer to local demand for traceable feed and create value for all the agricultural value chain.



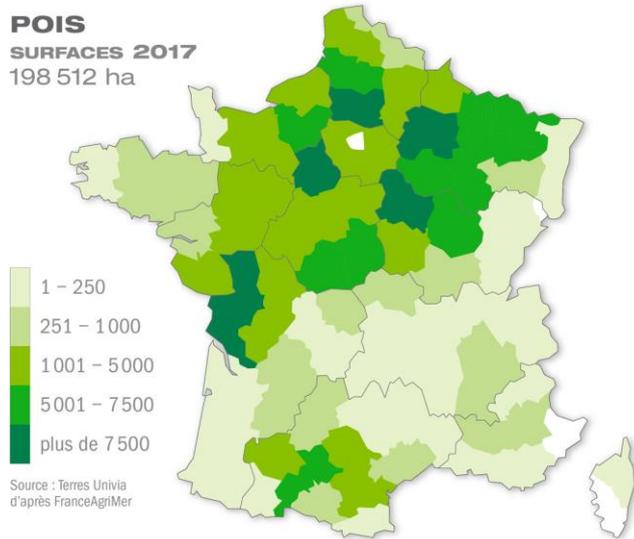
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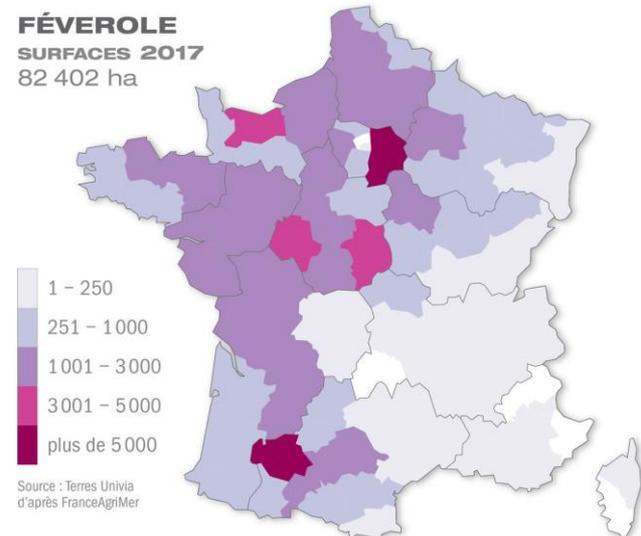
Thanks for attention

French legume seeds areas (2017)

POIS
SURFACES 2017
198 512 ha

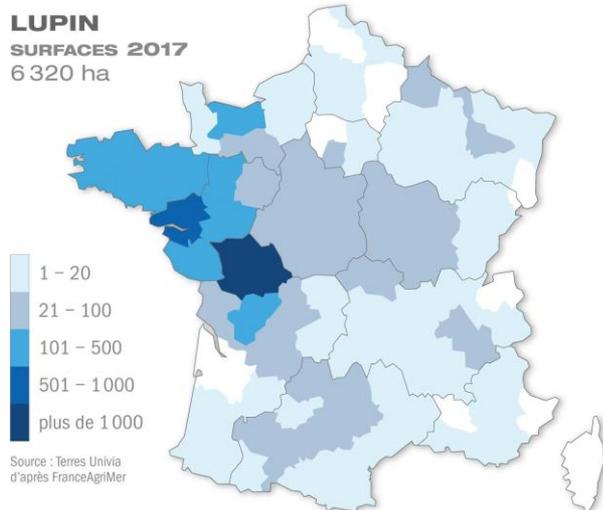


FÉVEROLE
SURFACES 2017
82 402 ha



Varying
legume seeds
in different
areas and well
adapted to
local feed
specifications

LUPIN
SURFACES 2017
6 320 ha



SOJA
SURFACES 2017
141 659 ha

