



The French Feed Database

An efficient private-public partnership

Gilles Tran

Association Française de Zootechnie





The French Feed Database

- ◆ The French Feed Database is based at **AgroParisTech**, the principal French university for agricultural and life sciences engineering
- ◆ It was created in 1989 by professors from the **Department of Animal Science**, Julien Coléou et Olivier Lapierre



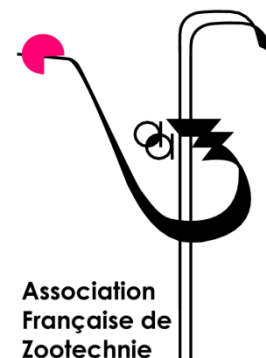
AgroParisTech
headquarters in
Paris





The French Feed Database

- ◆ Maintained by the **Association Française de Zootechnie** (French Association of Animal Production)
- ◆ President: **Daniel Sauvant**, INRA & AgroParisTech researcher
- ◆ The database is managed by Gilles Tran





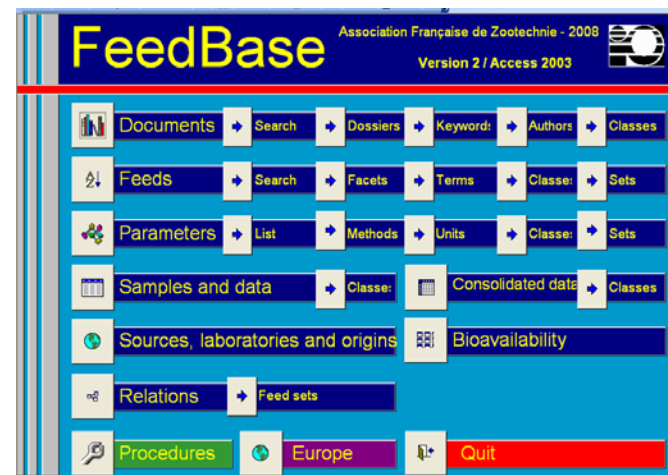
The network

- ◆ A network of 16 **members**:
 - R & D institutes (INRA, CIRAD, Institut de l'Elevage), trade organisations
 - Producers of raw materials, feed manufacturers and « firmes services » (premix manufacturers + consultancy service)
- ◆ The members:
 - They provide their **laboratory data**
 - They **pay a yearly fee**
 - They **share** the collected data
 - They bring their **expertise**
 - **They use the services of the database**



Database contents

- ◆ Data on chemical composition and nutritive value of **raw materials** and forages
 - Excluded: compound feeds, economic data, production results
- ◆ **Only raw data** from laboratories
 - We do not collect average values from tables
- ◆ All **feed materials**
- ◆ All **characteristics**
- ◆ All **animal species**





Contents

- ◆ 90% of the data come from private companies
 - Common feed materials: maize, soybean meal...
 - Proximate analysis (protein, crude fibre...)
- ◆ 10% come from public research and literature
 - Unusual or experimental raw materials, not found in the French market
 - Nutritional data from animal experiments



Characteristics

- ◆ Chemical and physical
 - **Nutrients** : proteins, fibres, carbohydrates, fat, amino acids, fatty acids, minerals
 - **Physical data** : density, viscosity...
 - **Undesirable substances** : mycotoxins, trypsin inhibitors, alkaloids...
- ◆ Nutritional values
 - **Values obtained from animal experiments**: digestibility of energy, proteins and minerals, nitrogen and dry matter degradability...



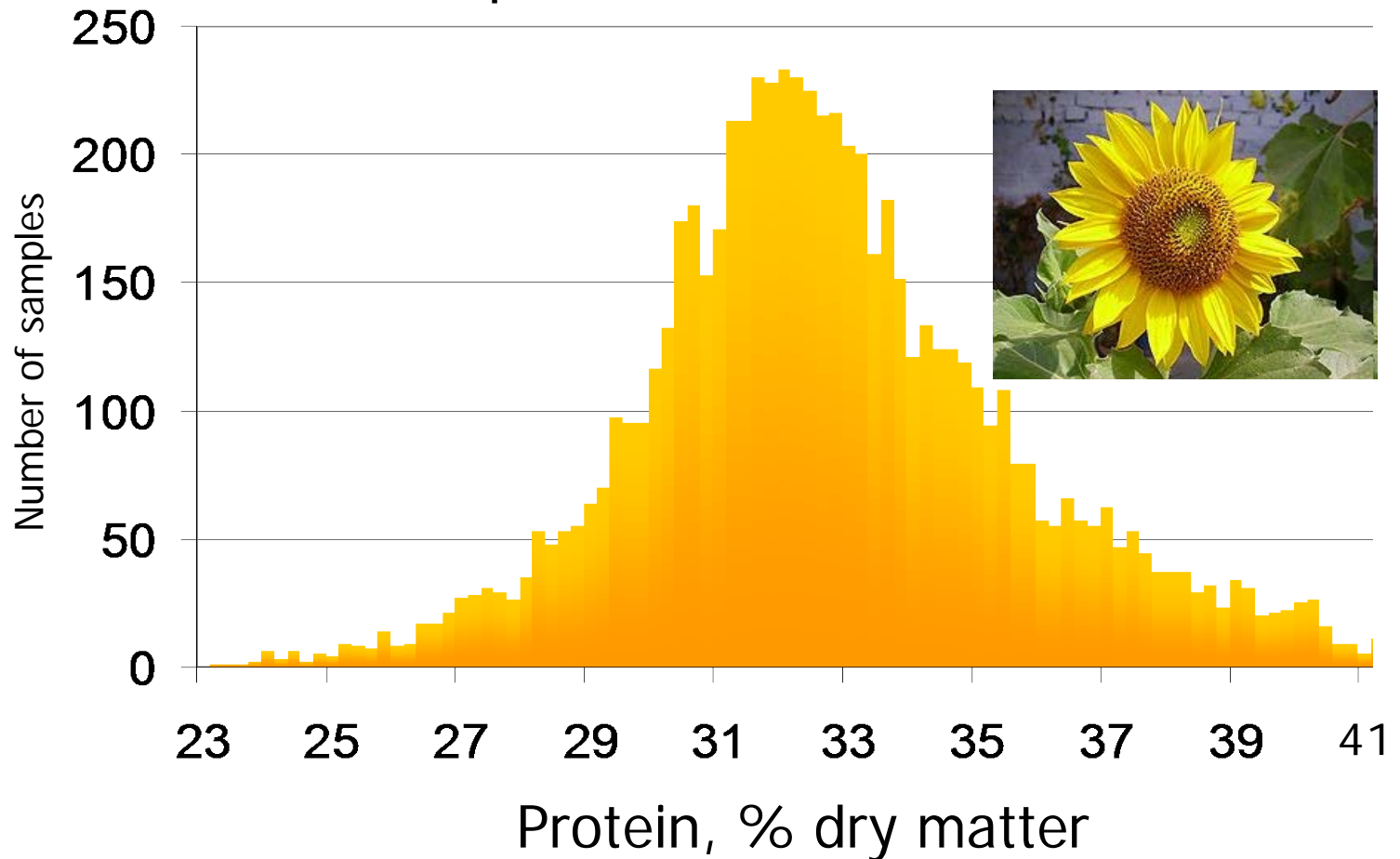
Contents

- ◆ 1.9 million of raw data (analytical and nutritional results)
 - More than 2500 raw materials and forages
 - Description and definition of the products
 - Nomenclature and keywords
 - More than 440,000 recorded samples
 - Each sample has a source, a provider, a country, a sample date etc.
 - More than 800 characteristics
 - Each characteristic is associated to one or several methods of analysis



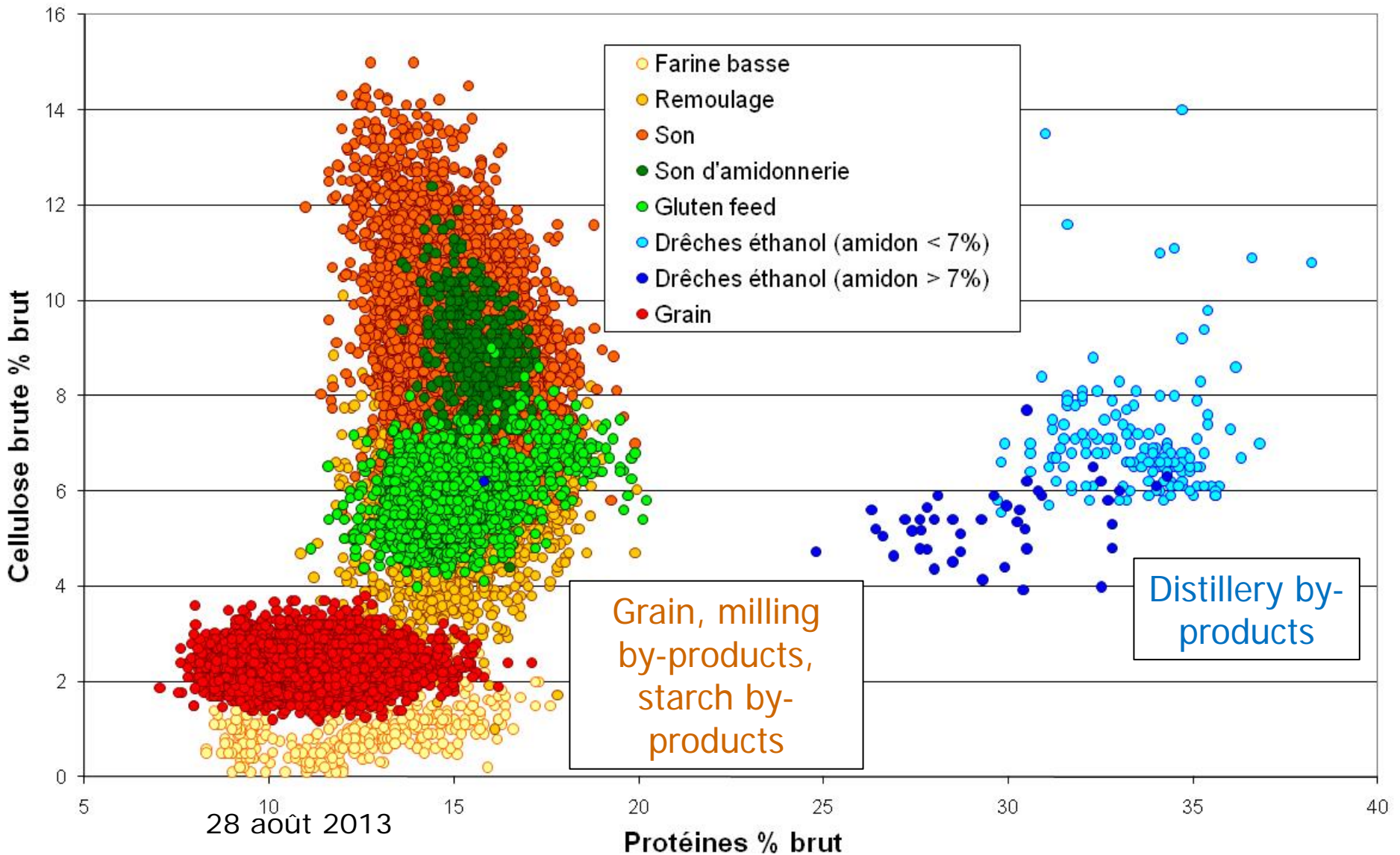
Intra-product variability

Crude protein of the sunflower meal





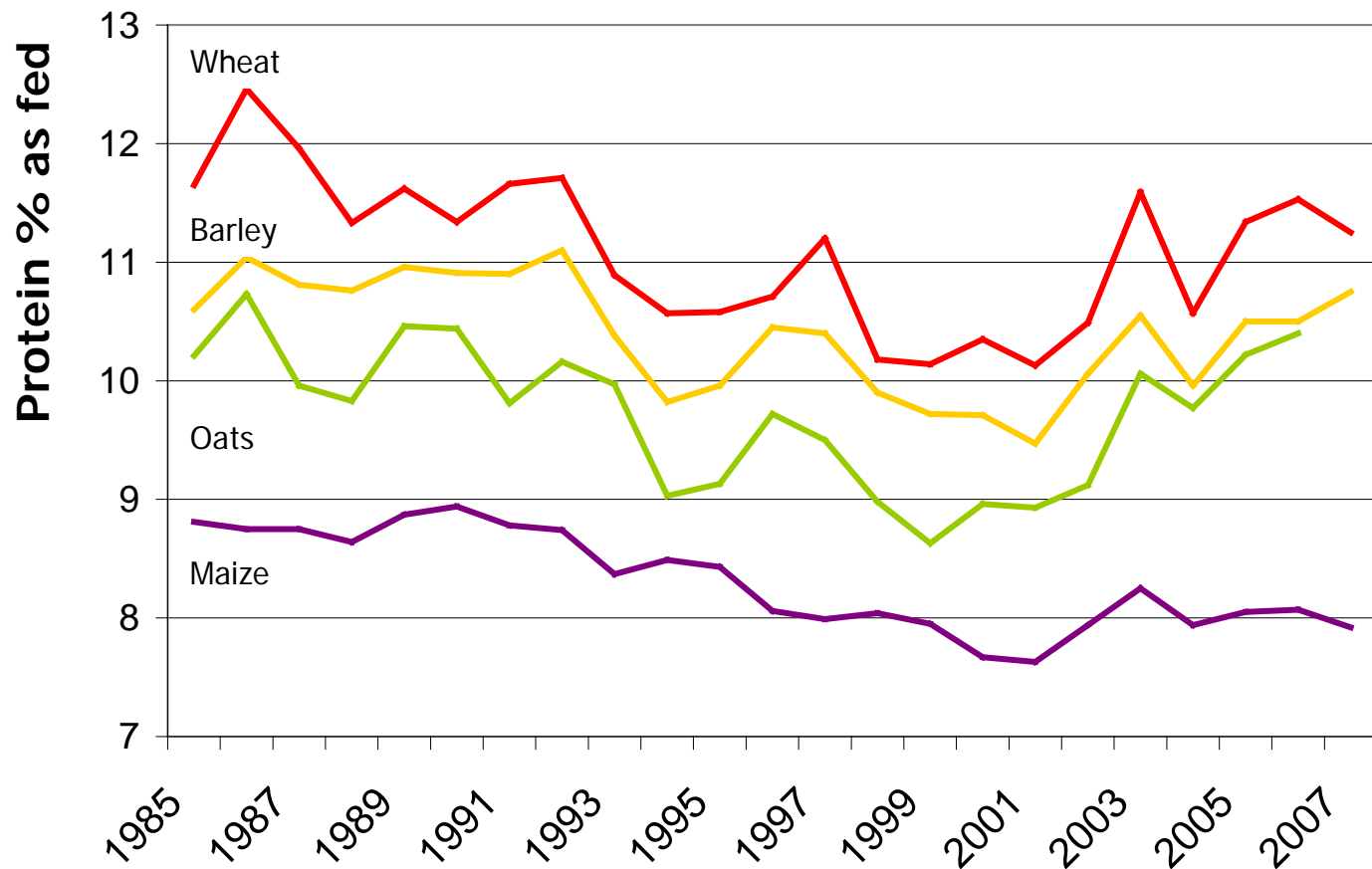
Wheat and by-products : protein vs crude fibre





Evolution over time

Protein content of French cereal grains since 1985





Data collection

- ◆ Our members are **required** to provide data to the database
- ◆ **Free choice of content**
 - Only raw data
 - A minimal description is required (nature of feed, dates)
- ◆ **Free periodicity**
 - Usually: yearly
- ◆ **Free format**
 - Usually: extraction from internal databases and transfer via email
- ◆ The members provide data as they want



Data transfer and validation

- ◆ The raw data must be « translated » to our formats:
 - Conversion of feed names, parameter names, units
- ◆ The data are validated:
 - By **comparing** them to data already in the database.
 - By performing *ad hoc* tests:
 - Example: the sum of amino acids must be lower than the crude protein content
 - 10% of the data are rejected and must be looked at one by one
 - Some are accepted
 - Some are deleted
 - Some are corrected or changes are made to the database



io-7 software

- ◆ The members have a free licence for **io-7**, a computerised feed table containing statistical data.

Microsoft Access - [Menu général]

Eichier Edition Affichage Insertion Format Enregistrements Outils Fenêtre 2 Tapez une question

io-7 www.feedbase.com Version 4.5 MS Access 2000 et ultérieur

Recherche de données

- Recherche simple (tableaux croisés)
- Recherche détaillée

Matières premières

- Liste des matières premières
- Echantillons disponibles
- Classes de matières premières
- Glossaire des termes descriptifs

Paramètres, méthodes et fournisseurs

- Liste des paramètres chimiques et nutritionnels
- Liste des méthodes d'analyse
- Liste des fournisseurs

Documents et sites Web

- Liste des documents
- Recherche par mots-clés
- Recherche par dossiers
- Recherche par auteurs

Relations et équations

- Liste des relations
- Recherche de relations

Contactez-nous Avertissement

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FeedBase.com

- ◆ Members have a free access to FeedBase.com, a website created with the [Cereopa](http://Cereopa.com) (Centre for Research on the Economy and Organisation of Animal Productions)
- ◆ FeedBase contains technical and economic data

FeedBase.com Données économiques et techniques en alimentation animale Visiteur

Accueil Données économiques Données techniques Liens Abonnements Nous contacter

Nouveau !

- Valeur énergétique des matières premières pour le porc : utilisation des données des Tables INRA-AFZ (avec feuille Excel contenant équations et coefficients)
- Tables INRA-AFZ de composition et de valeur nutritive des matières premières destinées aux animaux d'élevage
- CEREOPA - Centre de Recherches sur l'Organisation et l'Economie des Productions Animales
- La fraction lipidique des aliments et les corps gras utilisés en alimentation animale
- Face au soja, quelle stratégie d'approvisionnement en protéines pour les filières animales ? (PDF 510 Ko)
- Productions animales en crise : quelles possibilités d'adaptation des systèmes de productions et des filières, quels enseignements pour les acteurs ? (PDF 1089 Ko)

Données économiques

- Séries chronologiques sur la production française d'aliments composés et les prix de matières premières
- Estimations du CEREOPA pour la production d'aliments composés en France pour la période **octobre 2004 -> septembre 2005**
- Estimations du modèle Prospective Aliment pour les utilisations des matières premières
- 3ème trim. 2004 disponible !**

Données techniques

- Nomenclatures et définition des matières premières
- Compositions et valeurs nutritionnelles
- Variabilité des matières premières
- Téléchargez AmiPig**, table de digestibilité des acides aminés des matières premières chez le porc
- Mise à jour 8/4/2003**

Le profil de composition de la semaine : Corn gluten feed

Liens et documents

- Une base de données de sites web et de publications en ligne intéressant l'alimentation animale, couplée à une base de références bibliographiques
- Les 100 derniers liens**
- Nos publications**
- Mise à jour 2/9/2004**

Membres et abonnements

Nom Mot de passe

Si votre organisation n'est pas membre, cliquer ici pour faire un essai gratuit de 30 jours !

Accueil Données économiques Données techniques Liens Abonnements Nous contacter

Avertissement légal et engagement sur l'information personnelle
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Services

- ◆ Free or at reduced price for the members, full price for non-members
- ◆ Data files : raw or compiled data
- ◆ Data analysis and processing
- ◆ Literature searches and monographies
- ◆ Software and web development
- ◆ Any project about the quality of feed materials and the management of feed data



Major works

Tables de composition et de valeur nutritive des matières premières destinées aux animaux d'élevage

D. Saureau, J.-M. Perez et G. Tran, coord.

porcs
volailles
bovins
ovins
caprins
lapins
chevaux
poissons

INRA

Feedpedia Animal feed resources information system

INRA cirad

Home About Feedpedia Team Partners Support Feedpedia Contact us Search feedpedia.org

Automatic translation
Selectionner une langue

Feed categories

All feeds
Forage plants
Cereal and grass forages
Legume forages
Forage trees
Aquatic plants
Other forage plants

Plant products/by-products
Cereal grains and by-products
Legume seeds and by-products
Oil plants and by-products
Fruits and by-products
Roots, tubers and by-products
Sugar processing by-products
Plant oils and fats
Other plant by-products

Feeds of animal origin
Animal by-products
Dairy products/by-products
Animal fats and oils

Other feeds
Stewards
Other products

Latin names
Plant and animal families
Plant and animal species

Resources

Feedpedia is an open access information system on animal feed resources that provides information on nature, occurrence, chemical composition, nutritional value and safe use of nearly 1400 worldwide livestock feeds. It is managed jointly by INRA, CIRAD, AFZ and FAO.

The main objective of Feedpedia is to provide extension and development workers, planners, project formulators, livestock farmers, science managers, policy makers, students and researchers with the latest scientific information to help them identify, characterize and properly use feed resources to sustainably develop the livestock sector.

This is particularly important in emerging and developing countries where feed resources available locally are often under-utilized due to lack of information. Pooling global knowledge on feed resources, including unconventional and lesser known ones, contributes to the

Ami Pig

Digestibilité iléale standardisée des acides aminés des matières premières chez le porc

AFZ
Ajinomoto Eurolysine
INRA - UMRV/P
ITCF

français >>>
english >>>

PerfAgro^{P3}

Menu administrateur >>> Menu utilisateur

Modèles Perfagro

Charger Sauvegarder

Nom du modèle en cours

Saisie des informations

Saisie des données Importation des références

Optimisation

Optimisation complète

Export des données
Optimisation seule
Import des résultats

Rapport d'analyse

Export du rapport vers Excel
Détail du rapport

FeedMod

1. Choose a time period

Choose a year, a campaign or start and end quarters

Year [dropdown]
Campaign [dropdown]

Start quarter [dropdown] End quarter [dropdown]
2010-Q1 2010-Q4

2. Import data and availabilities

Import Eurostat data
Import Fefac data
Import material prices
Import availabilities

Update conversion coefficients
Calculate all feed tonnages

If you have updated the quotations:
Calculate material costs

EvaPig

Valeurs énergétique, protéique et minérale

Matières premières
Régimes

Unités
Didacticiel
Aide (F-1)
Mentions légales
Crédits
Site Web
Mise à jour
Quitter

Version 1.3.0.4

INRA

AJINOMOTO
EUROLYSINE S.A.S.

28 August 2013



Conclusion

- ◆ The French Feed Database has been serving the needs of private and public organisations of the feed sector **for more than 20 years**
 - By providing technical data
 - By helping them to develop feed data management systems
 - By helping them to disseminate and publish feed data
 - By helping them to take informed policy decisions about animal feeds