



# Food product innovations with grain legumes: which products for which markets? Global overview from MINTEL-GNPD 2010-2019 data

Marie-Benoît Magrini, Tristan Salord

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# **Food product innovations with grain legumes: which products for which markets?**

Global overview from MINTEL-GNPD 2010-2019 data

**Marie-Benoît MAGRINI, Tristan SALORD**  
UMR AGIR, INRAE-Occitanie Toulouse, France



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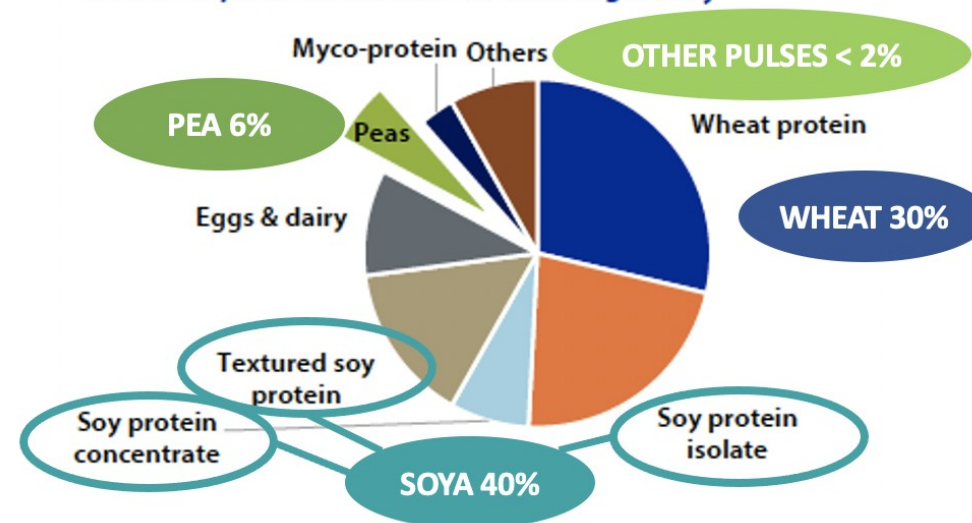
- Very **low legumes consumption in Europe**, as many other countries : 4 kg/year/pers. Europe (see *Weindel et al., 2020*)
- **Consensus for increasing such consumption for healthy and sustainable diets** : from 11 kg/year/pers. for Europe in 2050 (see *Poux and Aubert, 2018*) to 18 k/year/pers. (*Weindel et al. 2019*)
- But **technological lock-in** is still strong, reducing legume uses (see *Magrini et al., 2018,2019*)

### Example :

Most frequent protein ingredients in Meat Substitutes market;  
MINTEL-GNPD data, global scale 2000-2016  
From RADOBANK 2017 study

**Few food product innovations with pulses compared with major crops**

Source of protein in meat substitutes globally



- To give a ***first deep analysis*** of the food product innovations with legumes launched on markets
- ***Available for all***, especially small and medium firms that do not have sufficient financial resources to get such data analysis (market information asymmetries)
- ***Available for public policies***, to identify « motor » markets to be fostered as drivers of the relaunch of legumes in food, particularly for pulses (ie. to reverse technological lock-in).

### ***Which are those motor markets ?***

- Do these food product innovations with legumes contribute to healthy and sustainable diet expectations ?
- Do the legume species more and more used are the ones progressing in cultivation to secure supply chains ?
- Which co-evolution with scientific advancement in Food Science and Technology ?



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## MINTEL-GNPD dataset

A shopper networks in more than 80 countries to track food product innovation launched on markets

### 5 types of Food product innovation for each firm

New product/ Range extension/ Reformulation / Repackaging / Relaunch

### Market segments

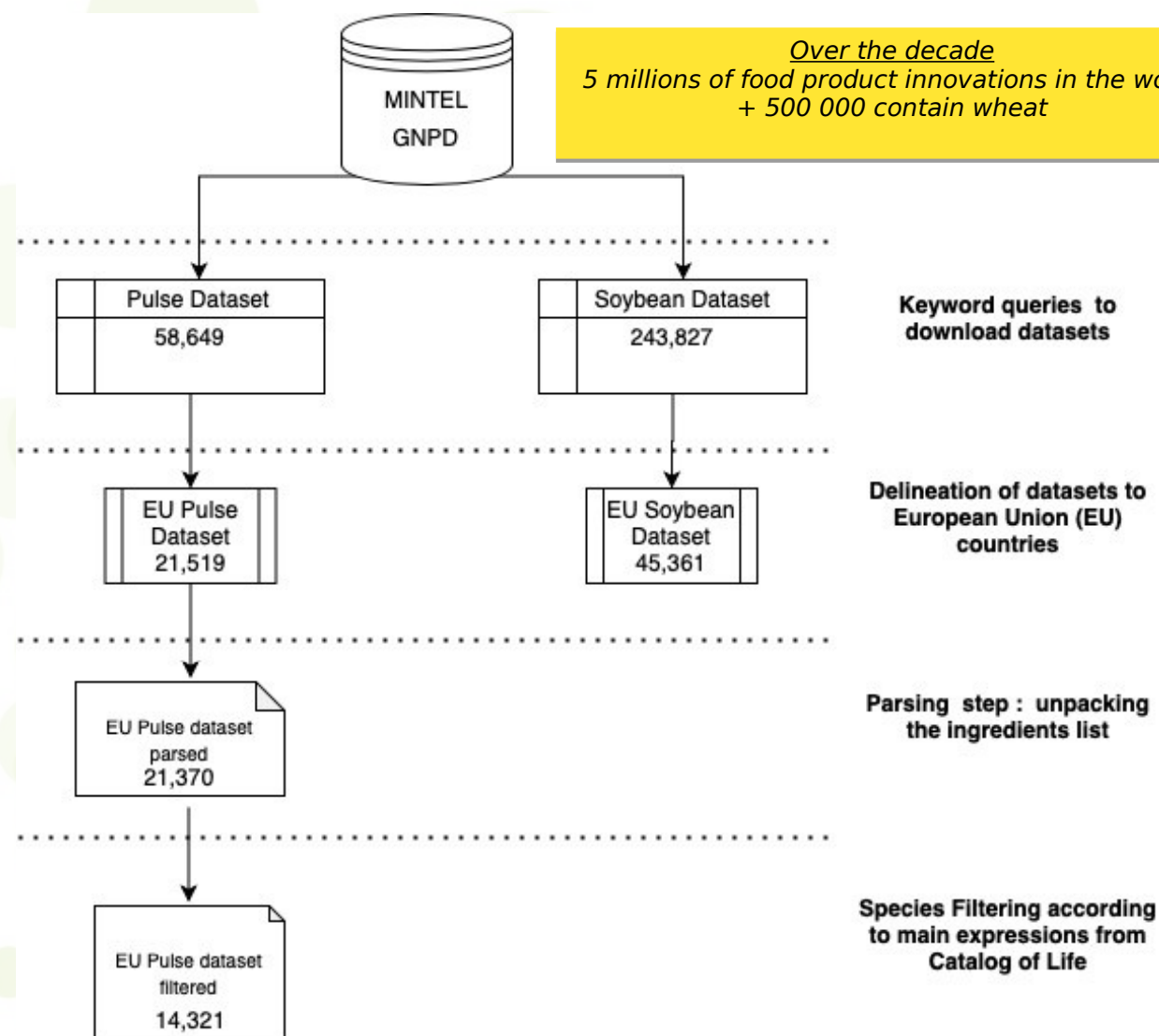
Claims on the packaging

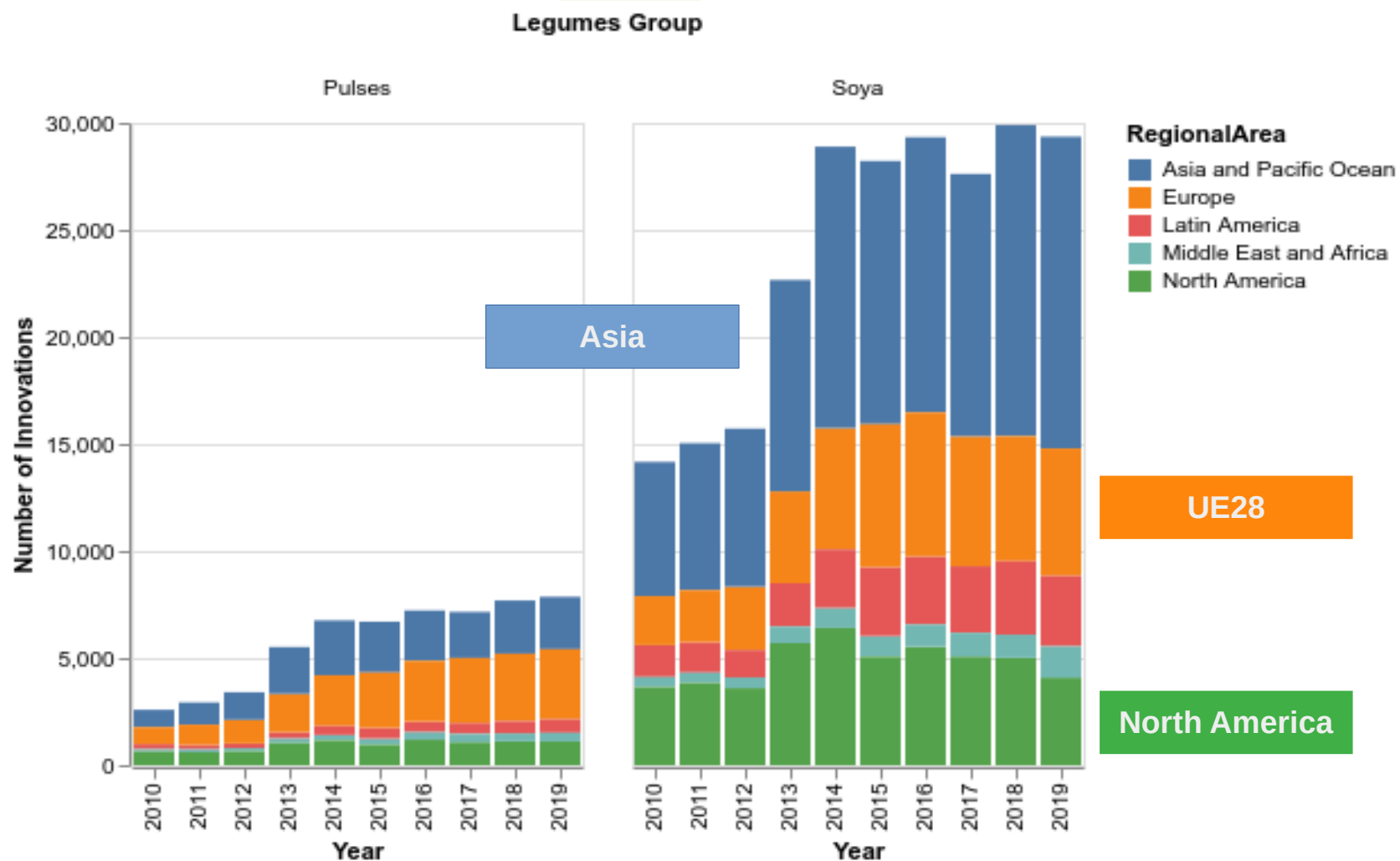
### Retrieval of data at global scale

Over 2010-2019

### Focus on UE28

Use of natural language processing (N.L.P) methods to unpack ingredients lists

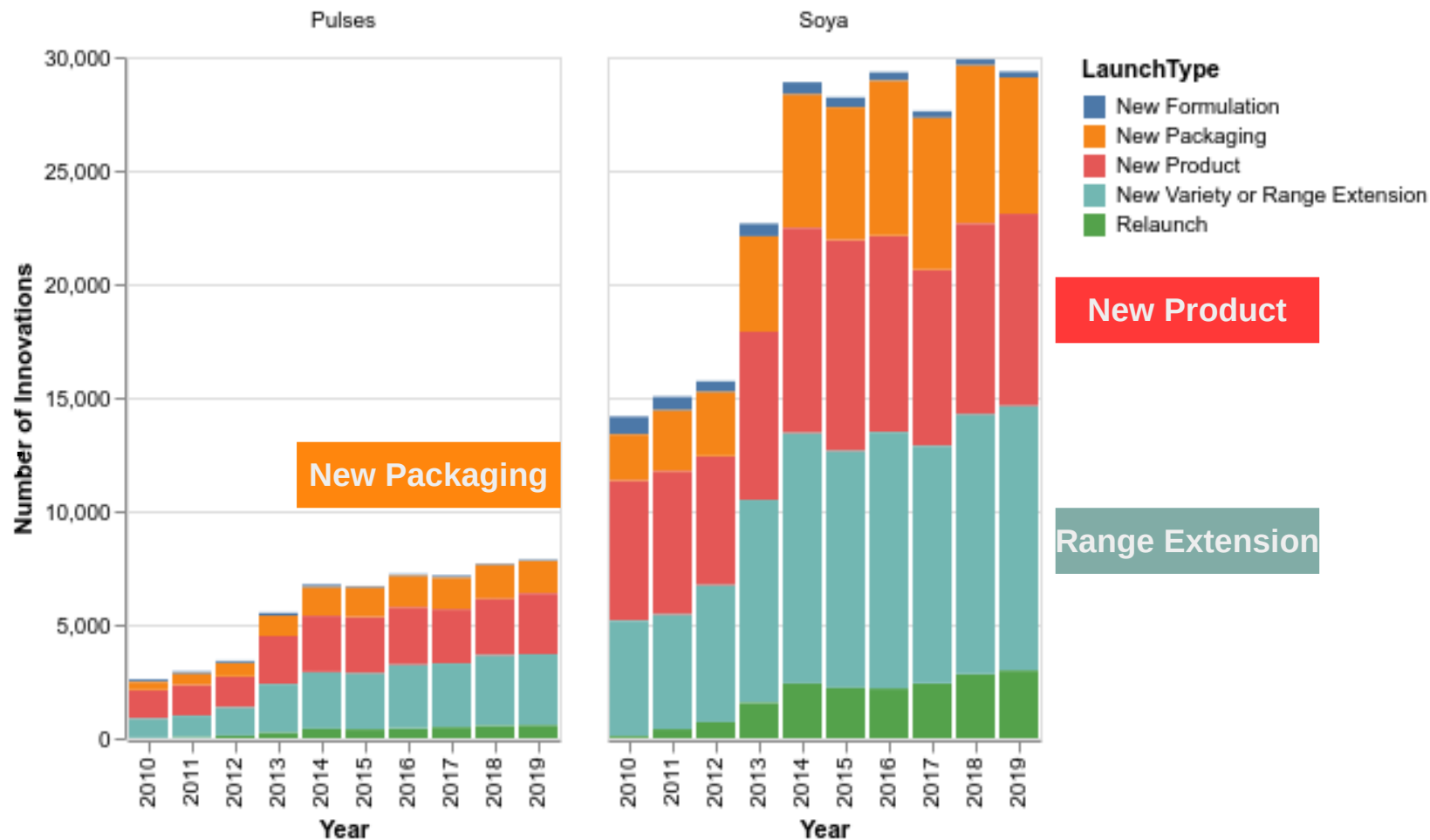




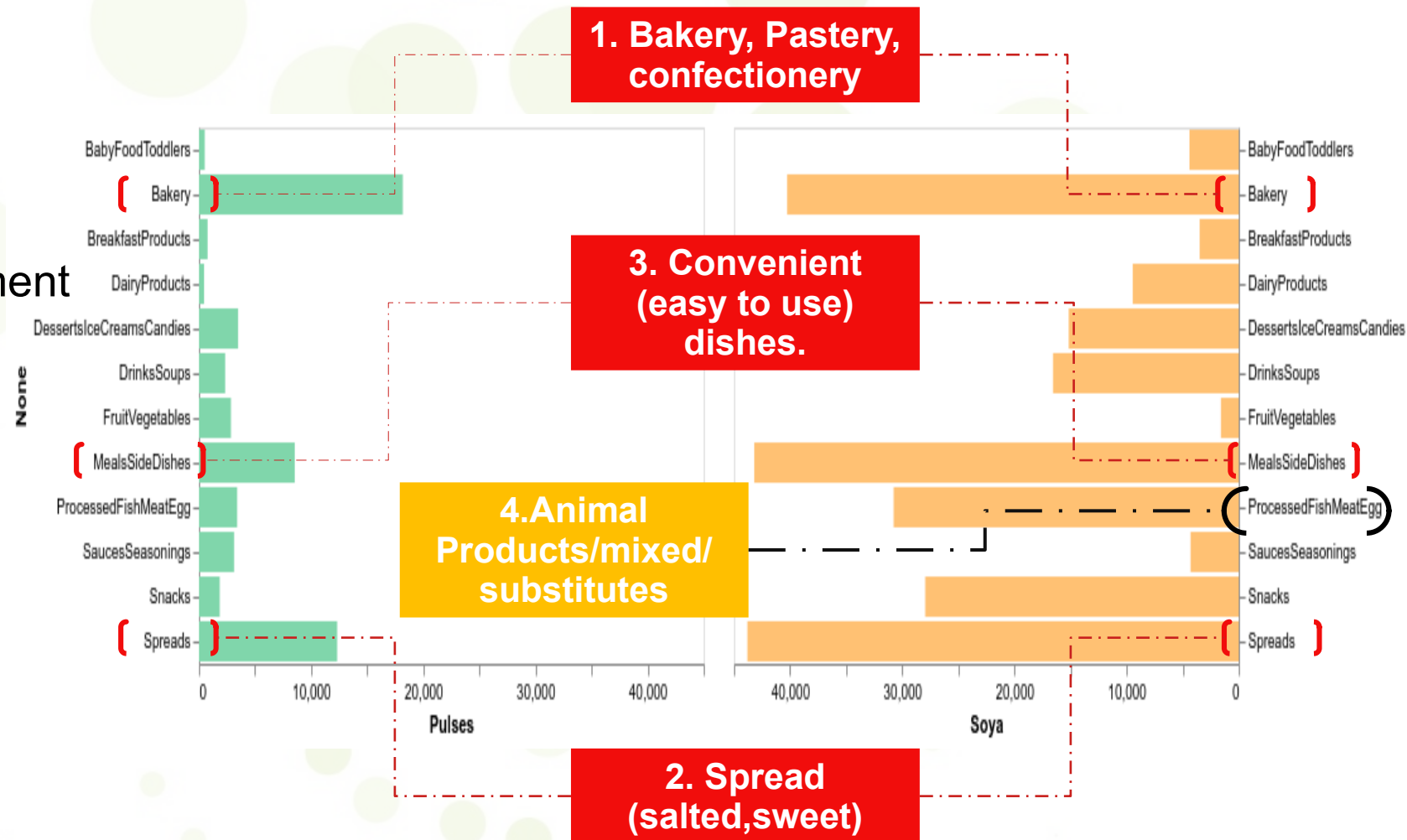
**Food innovations containing soy are more numerous than with legumes, even in Europe.**

- First type of product innovations is **RANGE EXTENSION** ⇒ choice of security ?
- More « new » than « renew » a **young dynamic market**

## Legumes Group



- **Meat substitutes** market segment **little invested** by pulses.
- « Tofu » is part of the « meat substitutes »

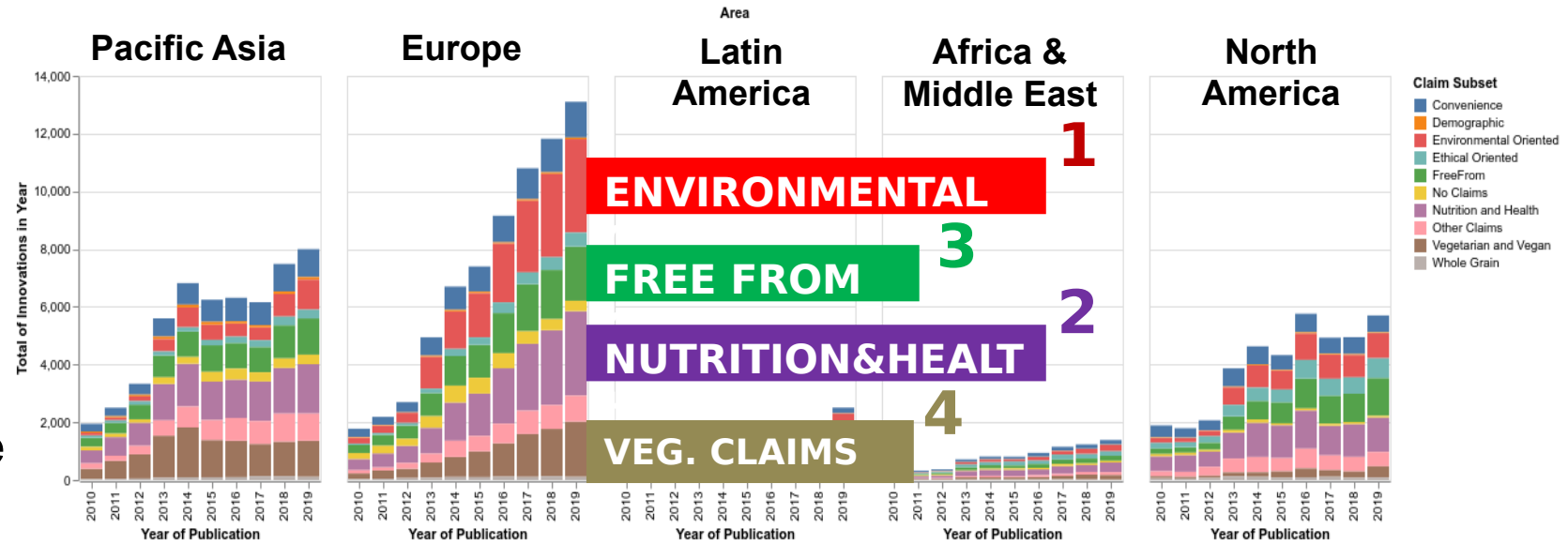




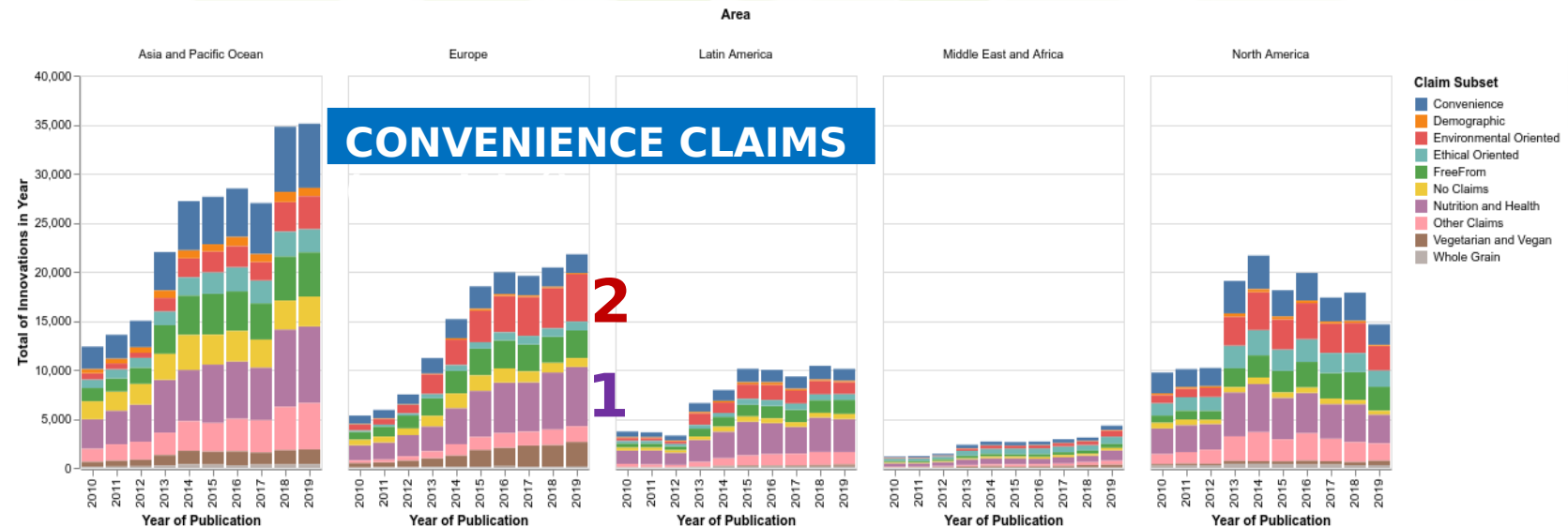
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- Europe driven by a dynamic of innovation based on sustainability/environmental and healthy issues.

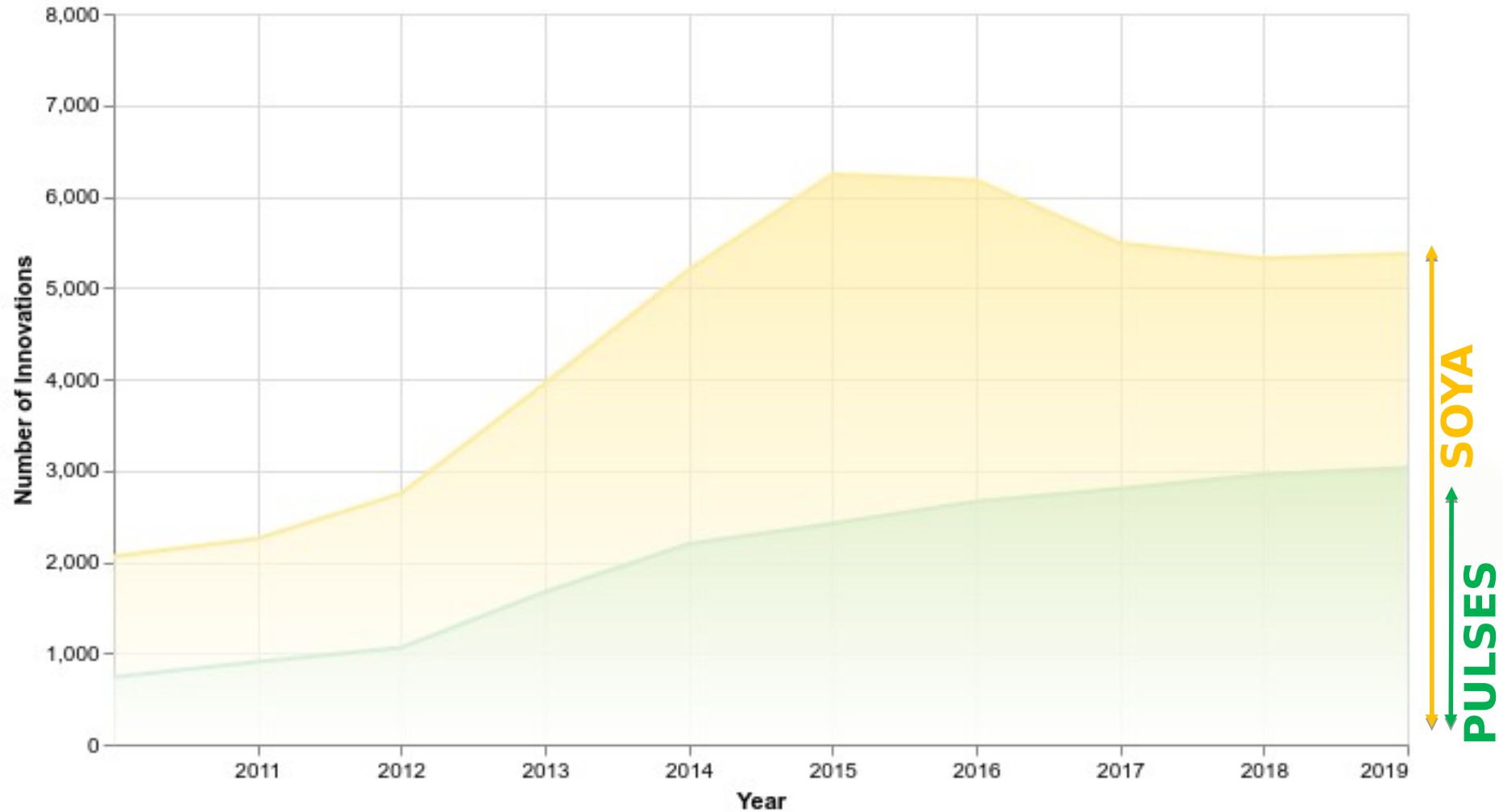
- Environmental dimension is more marked for pulses.

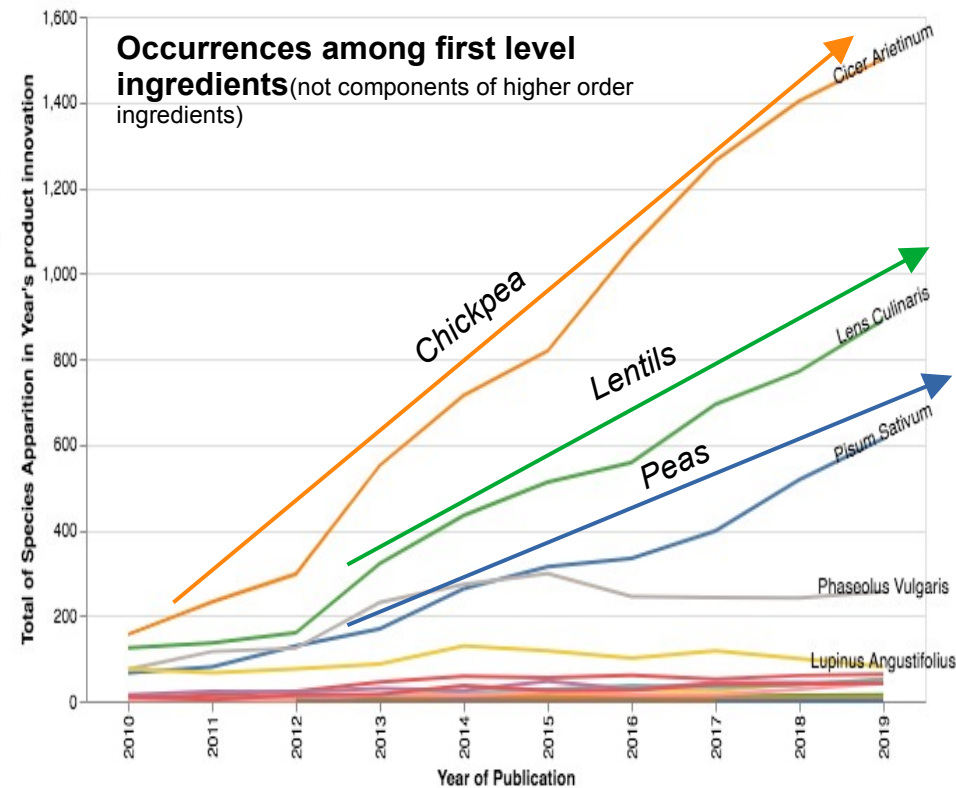
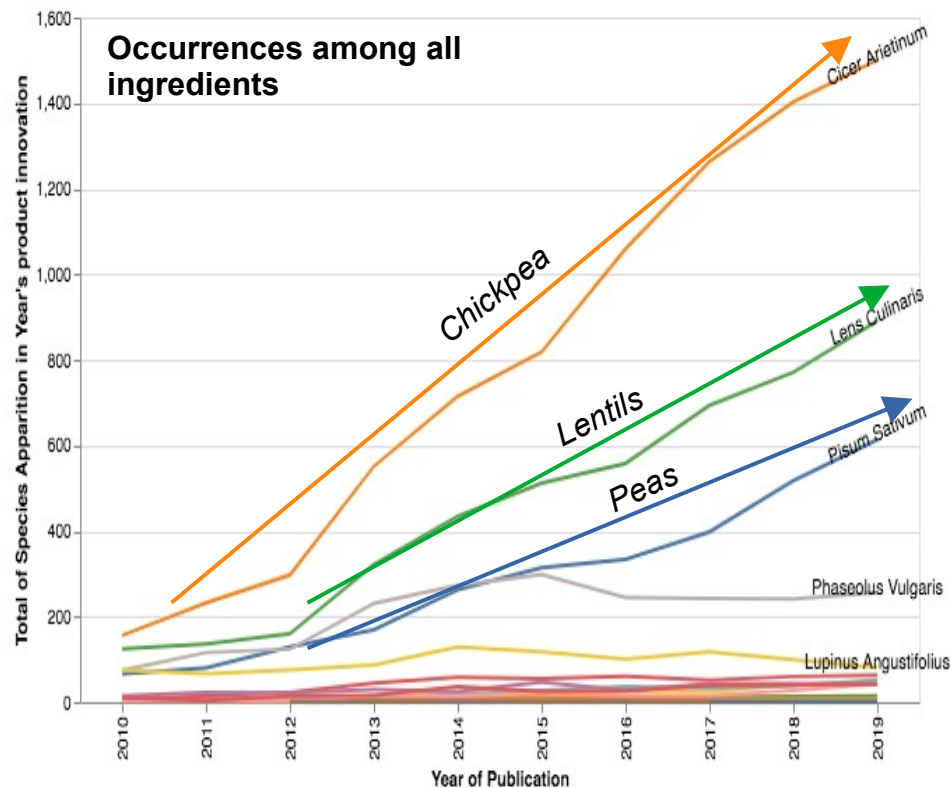


PULSES



SOYA

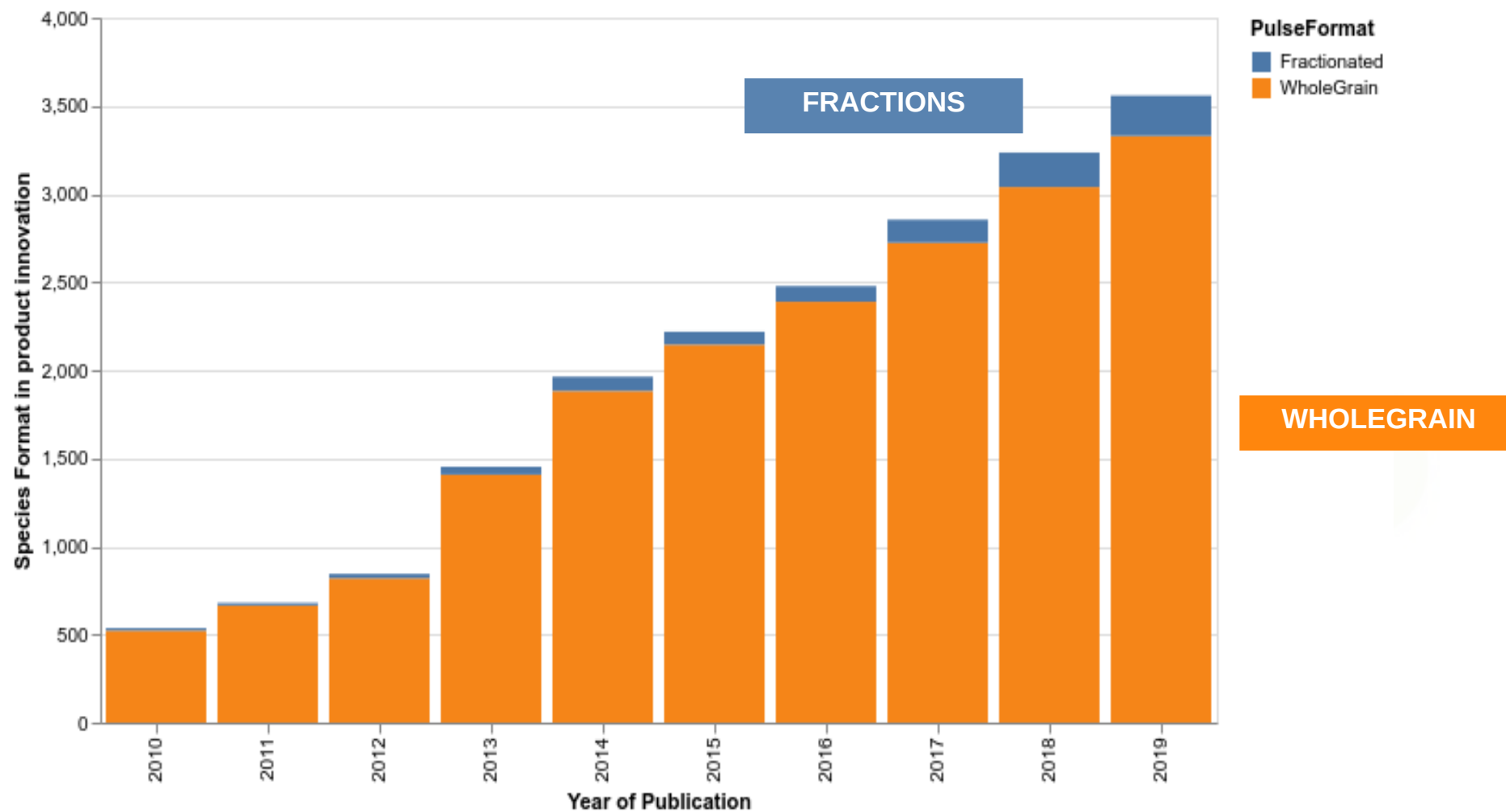




A strong growth of chickpeas and lentils, with their identity as a basic ingredient asserting itself, while peas remain more in a functional ingredient logic.



- Use of fractions or pulses extracts remains minor.



- ♦ **Deepen characterisation of innovatives markets concerning pulses** : compute nutriscore/processing score to help support desirable forms of innovation for sustainability and health,
- ♦ « **Routinise** » parsing methods used and constituted ontologies,
- ♦ **Make a focus on innovations products concerning « bakery, pastery & confectionery »**, it's also a trending topic in FS&T(Food Sciences &Technology),
- ♦ **Analyse sciences/markets co-evolution/Identify innovatives ecosystems** (clusters) based on the identification of firms carrying these innovations.