

# « Réseau PRO »: Establishing a method for the referencing of organic residues recycled in agriculture in a database

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### Introduction

In 2011, the Réseau PRO network carried out a survey to inventory the French field experiments studying the agronomic value and the environmental and sanitary putative impacts of organic residues (OR) recycled in agriculture [1]. 437 fields experiments were registered.

- terminologies to name or describe the studied OR were heterogeneous
- available information on the OR description varied a lot depending on the trial
- to identify and compare the OR studied in field experiments was difficult. Thus, a referencing methodology has been developed to describe and classify the registered OR (Excel file).

### Purpose of the method for the OR referencing

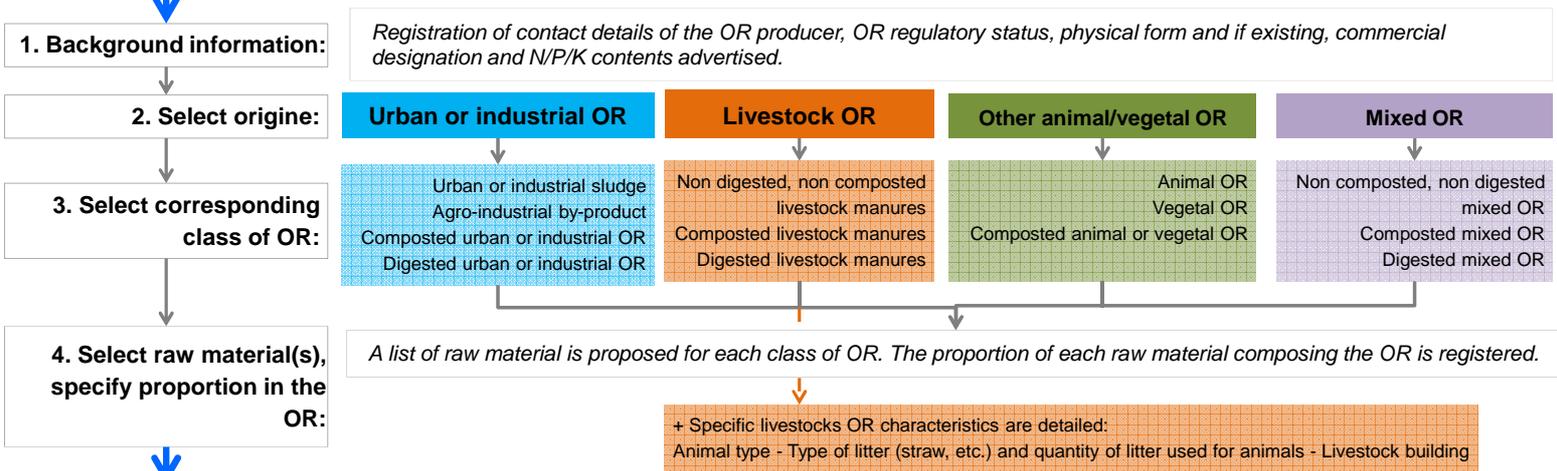
- to homogenize the OR terminologies and to organize the OR into a unique classification at a national scale (classes, sub-classes)
- to ensure an OR characterization as detailed as possible (composition, treatment, etc.)
- to connect the OR description and analytical data stored in the same databases

### OR description and characterisation methodology

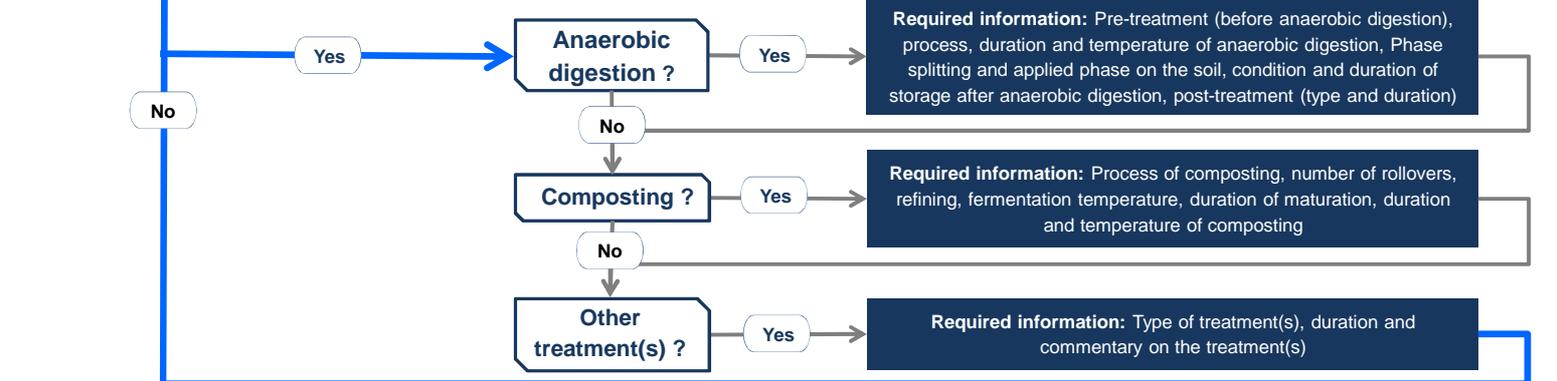
Criteria used to describe the OR were defined according to their putative impacts on the agrosystem. The method consists into 3 steps, organized into hierarchy and interdependent:

- 1) Background information and description of the OR: origin of the organic component(s), class of the OR, etc.
- 2) Treatment(s): type of treatment, duration and other characteristics treatment-related;
- 3) Storage: conditions and duration of the storage before the spreading of the organic residue.

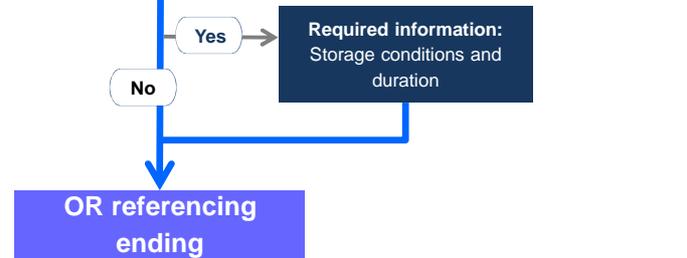
## STEP I: Description



## STEP II. Treatment(s) performed?



## STEP III. Storage post-treatment / before spreading ?



### Conclusion and perspectives

- The presented methodology is well adapted to the classification and the description of the wide diversity of OR recycled in France.
- OR are classified in an organised and homogenised classification at a national scale. Thus, it enables to compare the same types of OR studied on the different field experiments inventoried in the Réseau PRO.
- This method enables the development of a typology based on analytical data or expected field effects (C classes, N availability classes, etc.)
- This method is able to integrate future evolution concerning new OR recycled.

[1] Bell A, Michaud A, 2012. « Réseau PRO »: analyzing the French context of field experiments assessing agronomic, environmental and sanitary impacts of organic residues recycled in agriculture. Ramiran 2013.