

Finding consensual solutions between culinary and scientific classification systems of plant and fungal products

Educational implications and applications

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Contents

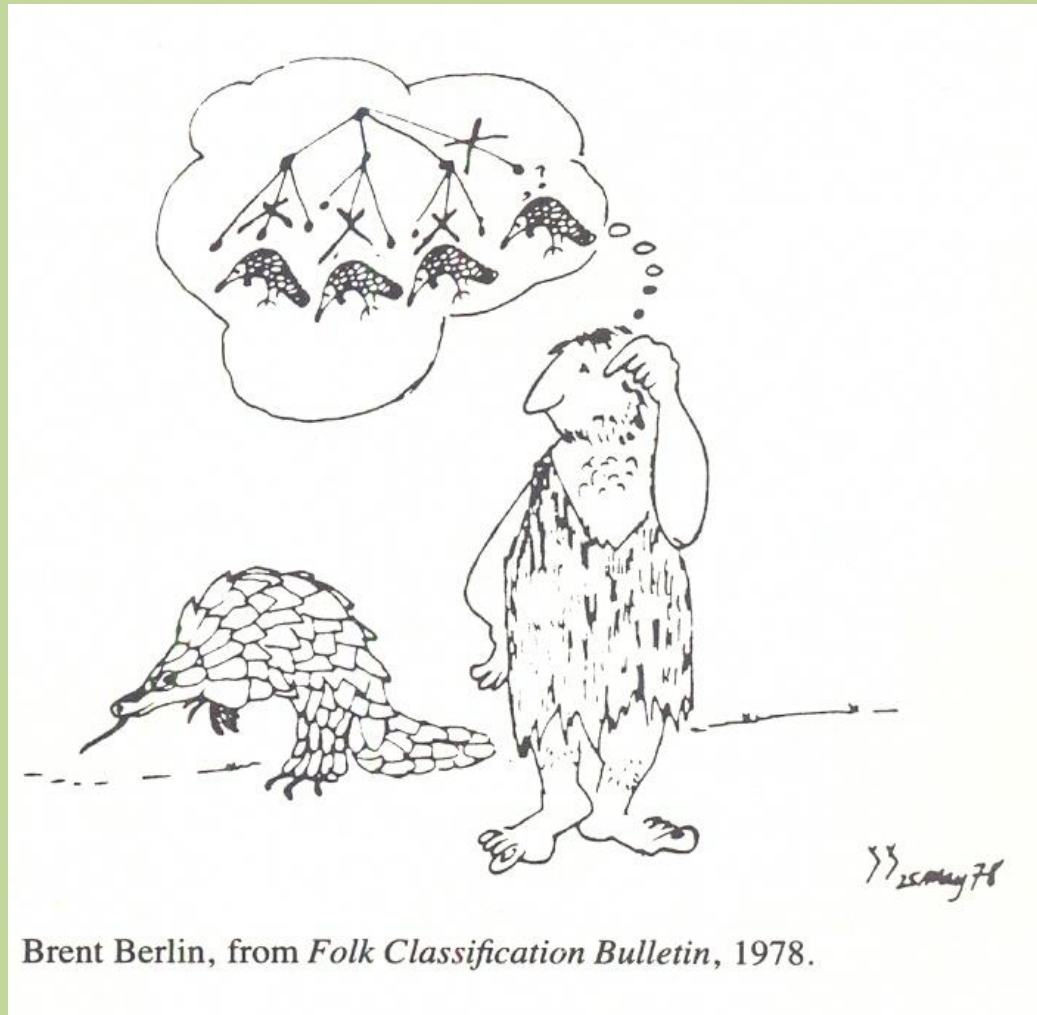
- **Biological and culinary classifications:**
 - Justification
 - Summary of previous classifications: folk, agronomic, culinary, scientific
 - Commonalities and differences
 - Consensual solution adopted
 - Classification
 - Anecdotes during the process of building the classification system
- **Educational implications and applications**
 - Adaptive system of classification (fluidity, pluridisciplinarity, interactivity...)
 - Students of culinary sciences, gastronomic botany, agronomy and similar disciplines

Biological and culinary classifications

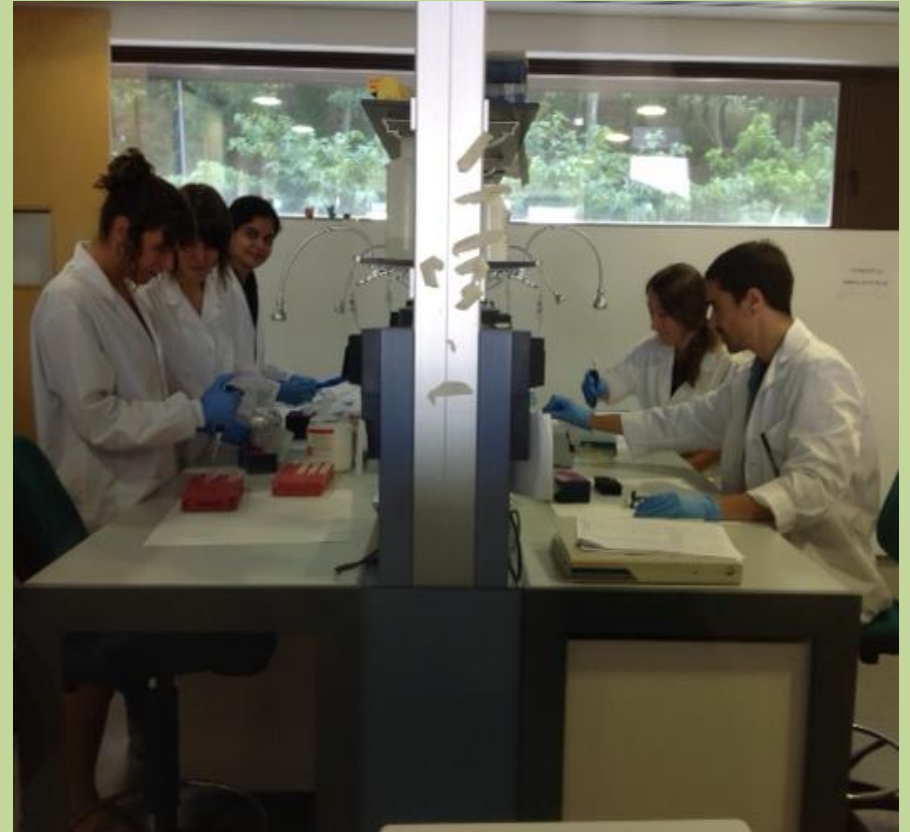
Justification

- Academization of culinary studies
- New advances in science and cooking
- Need for a system of classification for cooks that follows a scientific approach
- Benefiting from previous classifications to create a solid and robust system, yet flexible and adaptive to change

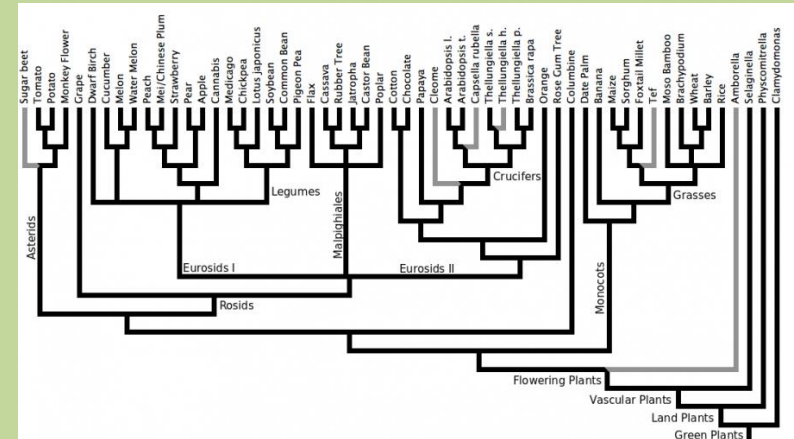
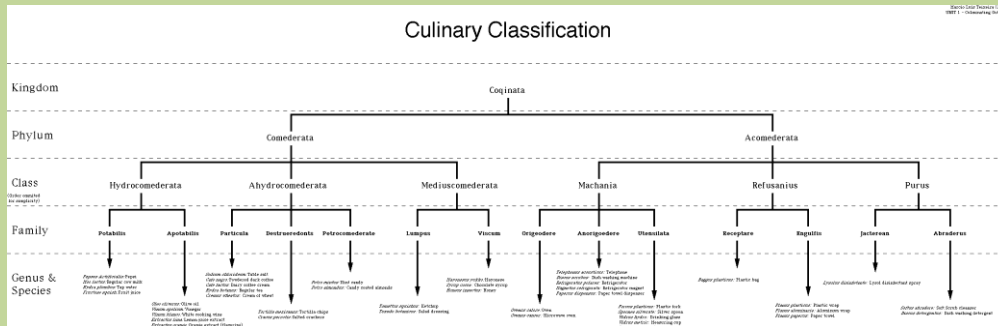
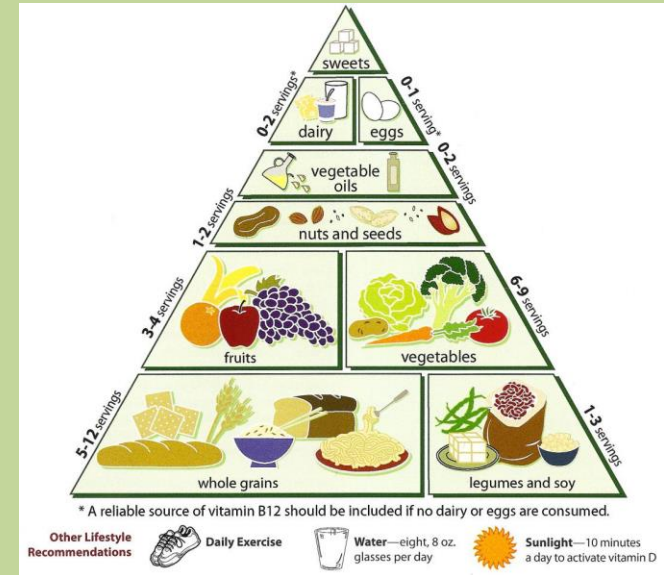
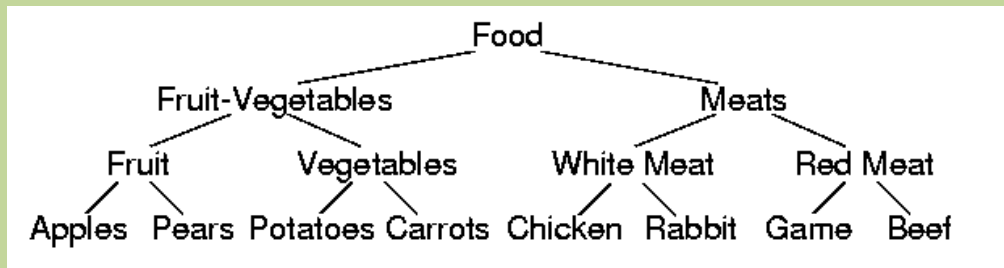
Need for a consensus



Working transdisciplinarily



Summary of previous classifications



Commonalities and differences between food classification systems

- Commonalities
 - Hierarchical structure
 - Distinct levels of complexity and internal coherence
 - Based on current and past knowledge
 - Changes with time
- Differences
 - Distinct levels of objectivity and universality
 - Ontological and epistemological assumptions

Consensual solution adopted

Intending to do a classification according to the scientific criteria and, at the same time, easy to understand in the restaurant business.

- Living beings vs. inorganic materials



Living beings



Inorganic materials

Consensual solution adopted

- Unelaborated vs. elaborated products



UNELABORATED

Olive



ELABORATED

Olive oil



UNELABORATED

Sugar cane



ELABORATED

Brown sugar

- Wild vs. cultivated



Wild



Cultivated

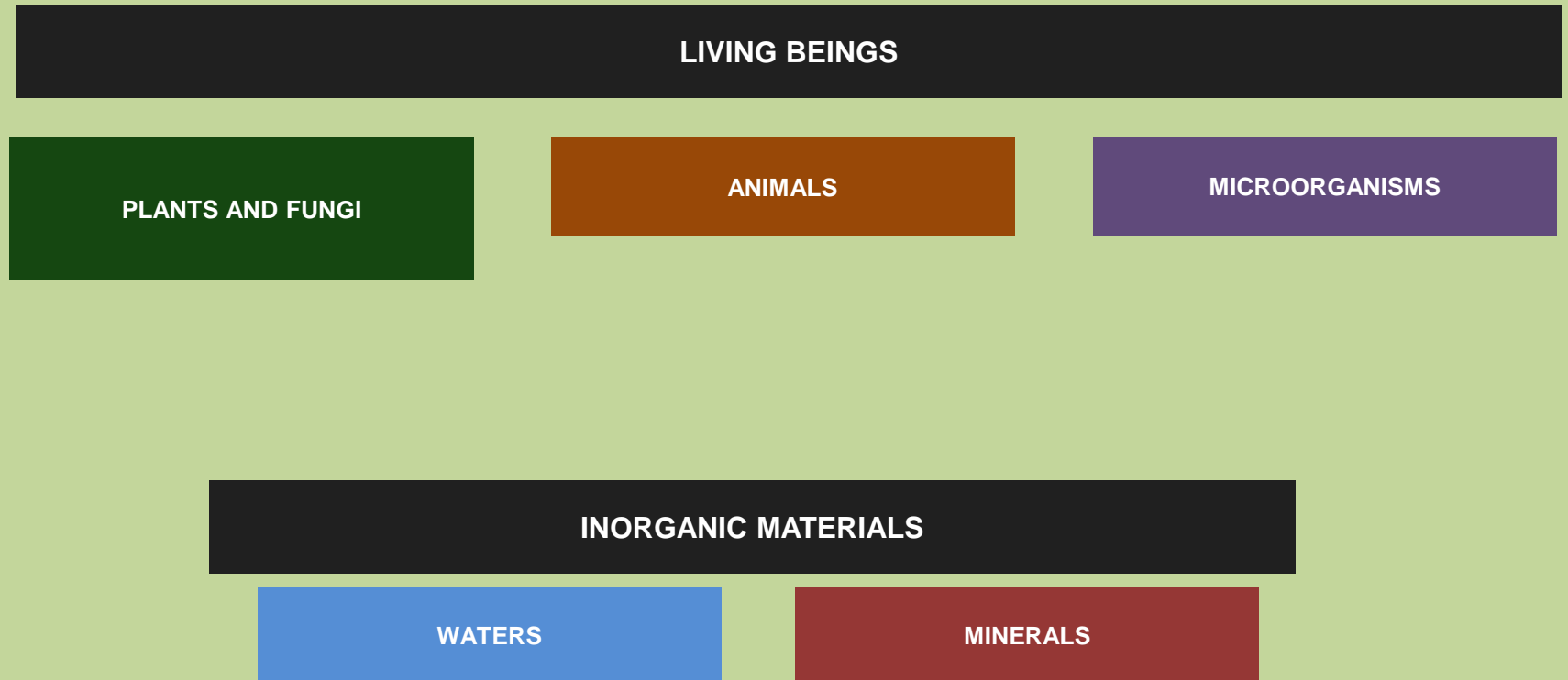


Wild



Cultivated

The **new** consensual classification of non-elaborated products



WORLD OF PLANTS AND FUNGI

TERRESTRIAL HABITAT

PLANTS

PRIMARY LEVEL

WILD

CULTIVATED

SECONDARY LEVEL

WILD

CULTIVATED

TERTIARY LEVEL

WILD

CULTIVATED

WILD

CULTIVATED

DERIVATES

FUNGI

PRIMARY LEVEL

WILD

CULTIVATED

SECONDARY LEVEL

WILD

CULTIVATED

TERTIARY LEVEL

WILD

CULTIVATED

WILD

CULTIVATED

DERIVATES

AQUATIC HABITAT

MACROALGAE

PRIMARY LEVEL

WILD

CULTIVATED

SECONDARY LEVEL

WILD

CULTIVATED

TERTIARY LEVEL

WILD

CULTIVATED

WILD

CULTIVATED

DERIVATES

BRYOPHYTES & VASCULAR PLANTS

PRIMARY LEVEL

WILD

CULTIVATED

SECONDARY LEVEL

WILD

CULTIVATED

TERTIARY LEVEL

WILD

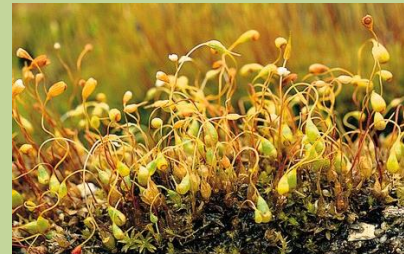
CULTIVATED

WILD

CULTIVATED

DERIVATES

Primary level



Secondary level



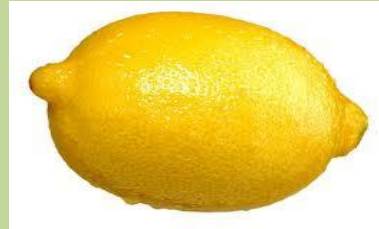
Tertiary level



Examples



LEMON TREE
(*Citrus xlimon*)
Primary level



LEMON
(Fruit of the lemon tree)
Secondary level



LEMON PEEL
(Epicarp of the fruit)
Tertiary level



MAIZE (CORN)
(*Zea mays*)
Primary level



CORNCOB (EAR OF MAIZE)
(Infructescence of the maize plant)
Secondary level



GRAINS OF FRESH CORNCOB
Tertiary level

Examples



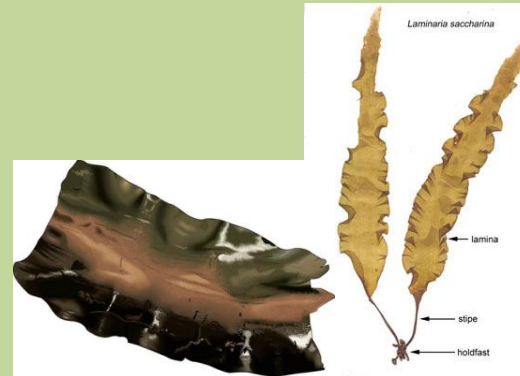
PORTOBELLO MUSHROOM
(*Agaricus bisporus*)
Primary level



MUSHROOM CAP
(Pileus of mushroom)
Secondary level



KOMBU
(*Saccharina japonica*)
Primary level



Secondary level

Anecdotes during the process of building the classification system

In botanical terms, pineapples (*Ananas comosus*) are not fruits, but infructescences, while for cooks, these are fruits.



Ginger (*Zingiber officinale*) is often classified amongst roots in culinary terms, while botanically is considered a rhizome, a type of underground stem.

In several latin languages, cooks name seafood as “fruits of the sea”. For botanists, these animals are clearly not fruits.



Educational implications and applications

Adaptive system of classification

- Fluidity
- Pluridisciplinarity
- Interactivity
- Adaptability
- Feeds from culinary and biological traditions



Students of culinary sciences, gastronomic botany, agronomy and similar disciplines

- Use of the consensual classification system amongst current students of Culinary Sciences at UB-UPC (B.S.) and future students of Gastronomic Botany at UB-UPC (M.Sc.), amongst others
- Use at a national and international levels



Thank you