

## ESA Adulteration Awareness Document

The European Spice Association (ESA) promotes the use of pure, safe and wholesome culinary dried herbs and spices that are true to name and provide the quality and safety that is expected by the customer.

### Adulteration

Adulteration is the deliberate and intentional inclusion in herbs and spices of substances whose presence is not legally declared, is not permitted or is present in form which might mislead or confuse the customer, leading to an imitated food and/or a product of reduced value.

Adulteration can be made through different kinds of dishonest practices, which cover the addition of substances that may significantly reduce the quality of the product and its intrinsic characteristics.

The following are examples of adulteration.

Product contains:

- ingredients, additives, dyes or any other constituent not approved for use in food and/or herbs and spices;
- ingredients, additives, dyes or any other constituent approved for use in food but unlawfully not declared or indicated in a form which might mislead the customer;
- spices or herbs that has had any valuable constituent omitted or removed which misleads the customer (e.g. spent and partially spent spices and herbs, de-oiled material, defatted material);
- a different part of the same botanical plant, rather than the one declared to an extent that this is misleading the customer;
- technically avoidable amounts of parts from other botanical plants than the one declared.

### Standardisation

Culinary dried herbs and spices are added to foods to give their organoleptic properties. Since herbs and spices are agricultural crops from global origins they are naturally variable in these parameters. It is therefore a necessary practice to **standardise** herbs and spices to deliver a consistent expected quality required by customers.

**Standardisation** is the process by which different batches of the same botanical identity or component parts of the same botanical identity are blended together in variable proportion to give the required consistency. Standardised product has a single ingredient declaration. Product which is prepared with other ingredients is classed as a Blend or Mix and has a declared ingredient list.

For some culinary dried herbs and spices the relevant ISO standard gives a list of component parts and naturally occurring ranges of physical and chemical parameters that are considered to be acceptable. Other standards such as European Pharmacopeia may also provide useful insight. It should also be noted that naturally occurring contaminants are not considered themselves to be adulterants where their presence was not intentional.

## **Legislation**

Adulteration is a dishonest practice, which can lead to serious risks to public health and the final consumers. Adulteration is illegal in terms of food law and – in many cases – in criminal law and may result in severe fines and criminal prosecution by national authorities.

The European Spice Association (ESA) is firmly against any practice of adulteration and unfair competition. The ESA Self-Regulating Mechanism stimulates ESA members to follow, with due diligence all the matters pertaining to their business, in compliance with all relevant EU and national legislation. This Self-Regulating mechanism protects the reputation of the Association, the members and the quality and safety of products, as expected by the respective customer and the final consumer.

## **Prevention**

The companies represented by ESA are well aware of the risk of adulteration and closely monitor the products they handle. Risk assessments may be performed considering:

- **Evaluation of the supply chain, e.g.**
  - History of supply
  - Supplier capability of meeting legal and other requirements
  - Adherence to GAP and GMP
  - Adherence to HACCP principles
  - Traceability
  - Availability (crop failure)
  
- **The nature of the material, e.g.**
  - Form (whole, ground, crushed)
  - Price
  - Botanical identity
  - Commercial grade

- **Product testing, e.g.**
  - Targeted analysis, such as dye testing
  - Confirmation of purity using non-targeted fingerprinting techniques and chemometrics
  - Organoleptic assessment
  - Microscopic Identification

ESA and its members are constantly working with agencies, suppliers, laboratories and enforcement bodies around the world to strengthen the awareness of this issue, to provide insight and understanding of sample identity and natural variation to prevent and remove the practice of adulteration of herbs and spices.

EUROPEAN SPICE ASSOCIATION

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