

## **AAPFCO Term & Definition Adoption**

The Official Publication (OP) of the Association of American Plant Food Control Officials (AAPFCO) is a principal reference for fertilizer terms and plant nutrient source material definitions. AAPFCO terms and definitions (“definitions”) form the basis for guarantees and claims made by producers and sellers of fertilizers and other materials used to raise food and horticultural crops. Federal, state and local government agencies rely on them for lawmaking, ensuring a fair marketplace and for agricultural producer and consumer protection. Definitions adopted by AAPFCO must be correct, appropriate and practical.

AAPFCO definitions are cited in agronomic research journals and publications in the United States and Internationally. Sound science demonstrating beneficial plant response and plant nutrient availability underlies those adopted.

### **The Approval Process**

Proposed definitions must be submitted to the Chairman of the AAPFCO Terms and Definitions Committee on forms furnished by the Association which are available on the AAPFCO Internet site. If minimum criteria are met, the application is forwarded to the appropriate workgroup(s) for evaluation. Research studies are forwarded to the Technical Review Workgroup; analytical methods are forwarded to the Laboratory Services Committee.

If approved by the appropriate workgroup(s), the proposal is placed on the next Terms and Definitions Committee meeting agenda. A proposal the Committee votes to move forward is sent to the AAPFCO Board of Directors for discussion. If the Board votes to move the proposal forward it becomes a voting item at the next annual AAPFCO meeting.

### **Application Requirements**

The application must be complete and must include the proposed definition. An acceptable analytical method is required for a substance or microbe. At least three research studies validating efficacy are required for nutrient sources. Supporting literature demonstrating the value of a term or definition may be necessary.

**AAPFCO Terms & Definitions Committee**  
**Term and Definition Approval Process**

1. Initial application. Applicant completes and provides the proposal to the Terms & Definitions (T&D) Committee Chairman using forms available on the AAPFCO Internet site. The Chairman will forward the application to the Application Review Subcommittee (ARS) for initial review to ensure minimum criteria are met. The ARS shall be the Chair and Vice Chair of the T&D and the Chair of Laboratory Services Committee.
2. Proposal requirements:
  - a. Contact information
  - b. Proposed definition
  - c. Method of analysis, either AOAC or other acceptable source.
    - i. The method must include safety, fitness-for-purpose, matrix, accuracy, repeatability, selectivity, practicality and environmental impact.
    - ii. Method validation using AOAC or other criteria may be required.
    - iii. The method may be for the substance being defined, or for the derived nutrient(s).
  - d. Supporting information. All supporting study methods and procedures must be provided, including a minimum of three scientific studies supporting any beneficial claims. The studies must demonstrate safety and efficacy of the substance following appropriate use. Testimonials are not acceptable. Studies should:
    - i. Be peer reviewed and published in generally accepted journals. Other scientific research conducted by a college, university or private research firm may be accepted at the discretion of the Technical Review Workgroup.
    - ii. Have appropriate controls.
    - iii. Be replicated for statistical analysis.
    - iv. Be randomized.
    - v. Be repeated. One growing season at one site is not sufficient to demonstrate beneficial response.
    - vi. Be statistically evaluated.
    - vii. Include the entire data set evaluated. Analysis of partial data must be noted.
    - viii. Results derived from more than one source must be accompanied by a complete list of articles and other source materials.
3. The T&D Chair will request additional material if minimum application criteria are not met. Acceptance or rejection of supporting documentation is at the discretion of the T&D Committee. If minimum criteria are met, the Chair will forward the proposal to the appropriate committee and/or technical review workgroup(s). The method of analysis is sent to the Laboratory Services Committee.
4. The T&D Chairman will place the proposal on the next T&D Committee meeting agenda if workgroup and committee evaluations are favorable.
5. If the T&D committee vote is favorable, the proposed definition is forwarded to the AAPFCO Board of Directors (BOD) for consideration to be moved to tentative status. If the BOD vote is positive, it is placed on the list of voting items for consideration by the general membership at the next AAPFCO annual meeting.
6. If the term or definition is approved by general membership, it becomes tentative and is published in the next printing of the Association's Official Publication.
7. After a period to allow for additional input, a tentative term or definition may be recommended to the BOD by the T&D Committee for consideration as an official term or definition at the next AAPFCO meeting.
8. If a term or definition is approved by vote of the BOD, it becomes an official term or definition.

TERMS & DEFINITIONS COMMITTEE  
SUBMISSION REQUEST FORM

Submission Date: \_\_\_\_\_

CONTACT INFORMATION:

Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Category:    New Fertilizer Material    New Term    Soil Amendment    Beneficial Substance

Submission's Proposed Definition:

AOAC or Equivalent Method(s) of Analysis (if applicable):

Submitted Research: (Minimum of 3 required)

Additional Research Citations:

Can this material be posted to the Secure Site of the AAPFCO Website? (For control officials only.)

Can this material be posted to the AAPFCO Website for everyone to see?

## **CURRENT AAPFCO Definition**

T-99 Humic substances:

the major organic constituents of soil organic matter and the aquatic environment, consisting of complex heterogeneous mixtures of carbon-based substances formed by biochemical reactions during the decay and transformation of plant and microbial remains. They are primarily composed of three main fractions, called humic acids, fulvic acids, and humin, which are operationally defined by their solubility in dilute alkali and acid solutions. High concentrations of humic substances are commercially harvested from terrestrial deposit of Leonardite, oxidized lignite, oxidized sub-bituminous coals, humalite, carbonaceous shales, peat, sapropel. (Official 2015, SA) See *Association of American Plant Food Control Officials no. 69, pg. 77 (2016)*.

## **PROPOSED DEFINITION (8/2/2018):**

T-99 Humic substances:

the major organic constituents of soil organic matter and the aquatic environment, consisting of complex heterogeneous mixtures of carbon-based substances formed by biochemical reactions during the decay and transformation of plant and microbial remains. They are primarily composed of three main fractions, called humic acids, fulvic acids, and humin, which are operationally defined by their solubility in dilute alkali and acid solutions. High concentrations of humic substances are commercially harvested from terrestrial deposit of Leonardite, oxidized lignite, oxidized sub-bituminous coals, humalite, carbonaceous shales, peat, sapropel, **and plant materials**. (*emphasis added*)

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