The “humic balance” refers to the balance between the formation and decomposition of organic matter (humus) in the soil, which is crucial for its health and fertility. This balance is often improved by adding humic and fulvic acids, which increase water retention, improve soil structure, and facilitate nutrient absorption by plants. Factors such as soil pH, clay content, and agricultural practices (tilling, crop type) influence this balance, and these substances are also used as supplements for animal or human health.

Are organic materials that improve soil structure and fertility by adding humus. They consist of products such as compost, manure, or dead leaves, which gradually decompose to nourish the soil and plants. These amendments are beneficial for all soil types, especially poor, clayey, or sandy soils.

Composition and common examples

Compost: Produced by the fermentation of organic plant and animal matter such as dead leaves, kitchen waste, grass clippings, or manure.

Composted manure: Animal waste (cattle, horses, sheep) mixed with litter. It is best to use it when composted, when it has an earthy smell.

- Dead leaves: Can be used as mulch or left on the ground to decompose.
- Others: Sphagnum peat moss, biochar, and vermicompost are other examples of organic amendments.

Role and benefits

- Improved soil structure: They lighten heavy, clay soils and add body to sandy soils.
- Increased fertility: They provide essential nutrients such as nitrogen, phosphorus, and potassium.
- Improved microbial life: They feed microorganisms that are essential to soil health.
- Improved water retention: They increase the soil's ability to retain water.

When and how to use them

- Time of year: Fall and late winter are often good times to incorporate them into the soil, especially compost.
- Application: It is recommended to spread them and then incorporate them into the soil. For clay soils, it is best to work on dry (not wet) soil to avoid compacting it and to allow the clods to aerate before winter.

In the agricultural context (soil)

Definition: This is the assessment of the condition of soil organic matter.

Role of humic/fulvic acids:

Improve soil structure (porosity, water retention).

Complexify nutrients, making them more available to plants.

Stimulate microbial activity and soil health.

Help chelate cations, balancing pH.

Factors influencing the balance: pH (alkaline slows down), clay content (slows down), tillage (accelerates decomposition), and crop type.

In other contexts

Dietary supplements/animal health: Humic and fulvic acids are used for their detoxifying properties, their richness in micronutrients, and their support of the digestive system.

Commercial products: Products such as “Humic Fulvic Booster” or “HUMICAL” combine these acids with nutrients for balanced plant nutrition.

In summary

A good humic balance means soil rich in stable organic matter, promoting high yields through better availability of nutrients and water. Humic acid-based products help achieve this balance.

Other sources of humus include compost, composted manure, green manure, biochar (enriched plant charcoal), organic mulch (leaves, straw, wood chips), bocashi, crop residues (roots, stems), as well as animal excrement and dead insects, all decomposed by soil fauna and microorganisms (earthworms, bacteria, fungi) to form this nutrient-rich amendment.

Plant sources and residues

Organic mulch: Dead leaves, straw, grass clippings, wood bark, nut shells, etc.
Green manure: Specific crops (legumes, grasses) left in place or buried.
Garden residues: Hedge trimmings, branches, fruit and vegetable waste.
Whole plants: Roots, stems, dead plants.

Animal sources

Manure and droppings: Composted manure, bird droppings, etc.
Dead animals: Insects and small invertebrates that die naturally in the soil.
Amendments and specific products
Compost: Controlled decomposition of organic household and garden waste.
Bokashi: Technique for fermenting organic waste that accelerates humus formation.
Biochar (plant charcoal): Stable carbon that, once enriched, effectively increases humus content.