



Designation: **E2880—16 E2880 – 16a**

Standard Terminology Related to Biorationals¹

This standard is issued under the fixed designation E2880; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This terminology is used in test methods, specifications, guides, and practices related to biorationals comprising biologically-derived materials or, if synthesized, the material must be structurally similar and functionally identical to a biologically occurring material with minor differences between the stereochemical isomer ratios. These definitions are written to ensure that standards related to these materials and their uses are properly understood and interpreted. Terms included in this standard cover materials or products derived from animals, plants, microorganisms, or minerals and focus on functional or marketing claims, or both.

2. Terminology

biopesticide, *n*, *adj*—the term for certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals.

biorational, *n*, *adj*—*adj*—the term used to characterize a broad range of low environmental impact substances or products that are typically biologically-derived or, if synthetic, structurally similar and functionally identical to a biologically occurring material with minor differences between the respective stereochemical isomer ratios derived from biological or synthetic origins.

¹ This terminology is under the jurisdiction of ASTM Committee E35 on Pesticides, Antimicrobials, and Alternative Control Agents and is the direct responsibility of Subcommittee E35.22 on Pesticide Formulations and Delivery Systems.

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DISCUSSION—

Biorationals include biopesticides as well as nonpesticidal products, such as, but not limited to, those that are used for crop stress management, enhanced plant physiology benefits, root growth management, postharvest treatments or as an alternative to pesticides.

DISCUSSION—

Biorationals are used in areas, such as but not limited to, agriculture, aquaculture, forestry, plant health, industrial and residential areas.

biosurfactant, *n*—a biologically produced molecule that acts as a surface-active agent.

plant-incorporated-protectant, *n*—biopesticidal substance that plants produce from genetic material that has been added to the plant.

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