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## Abstracts

GRONDIN, BARBARA, 1985. **Working through the confusion of adjuvants.** Chemical Age 29(4): 6-8.

A start to understanding the adjuvant story is an examination of the characters. Adjuvants may be grouped into two categories; activators and special-purpose adjuvants. In this way, James Witt, an adjuvant expert at Oregon State University, simplifies the task of identifying what the many products do. The activator category consists of the following: wetter-spreaders, stickers, emulsifiers, emulsifiable oils, and plant penetrants. Special-purpose adjuvants would include foliar nutrients, compatibility agents, drift retardants, foam retardants, buffers, inverting agents, soil penetrants, stabilizing agents, feeding stimulants, washing agents, sinking agents, and protectant binders. "Remember, if the pesticide you are using is formulated adequately for a crop, using a wetter-spreader may not give better spreading or coverage, but rather runoff and less deposit. If the insecticide you are using is a systemic, you may get less pest control with a sticker, rather than more. If you are applying a pesticide close to harvest with a sticker, you may get better residual action and also end up over tolerance." Correct use of adjuvants, then, does require some homework. By knowing your needs and product's potentials, and by reading adjuvant labels with a critic's eye, adjuvants can be a profitable addition to the spray tank.

URBANO, CYNTHIA C. 1985. **Diagnosing and treating diseases.** Am. Nurseryman 161(10): 71-73.

A disease is a disturbance of the normal physiology, structure or function of a plant. Diseases can be broken into two categories: abiotic and biotic. Abiotic diseases include such things as air pollution, nutrient deficiencies, genetic abnormalities, and environmental constraints. Biotic diseases are caused by living organisms, such as fungi, bacteria, viruses, nematodes, parasitic seed plants, and mycoplasma-like organisms. There are six ways to control disease: protection, sanitation, exclusion, resistance, therapy, and avoidance. Protecton practices prevent parasites from colonizing a plant. Sanitation practices include destroying diseased plant material. Exclusion or quarantine isolates diseased plants from healthy ones. Resistance is the genetic ability of a plant to resist parasities. Using disease-resistant plants is the best way to control disease. Therapy involves applying control measures to plants that are already diseased.