One of the most important inorganic pesticides is sulfur, with its various compounds. Sulfur is practically nonpoisonous. In the finely ground condition or in the form of colloidal preparations it is widely used to control plant-feeding mites and powdery mildew fungi. To obtain a fine grind, sulfur is milled in special mills called micronizers. Often sulfur precipitated in the form of a colloid (from the purification of coke gas) is used after it is washed free of thiocyanates and other salts. In countries other than the Soviet Union colloidal sulfur for agricultural needs is obtained by precipitation from aqueous solutions of hyposulfite. Concentrated solutions of hyposulfite are carefully acidified with sulfuric or hydrochloric acid and the sulfur that separates out is freed of water-soluble salts by dialysis.

Pesticides in this group, for example borates, silicates and sulfur, are minerals that are mined from the earth and ground into a fine powder. Some work as poisons and some work by physically interfering with the pest. Older "inorganics" included such highly toxic compounds as arsenic, copper, lead and tin salts. Current inorganic pesticides are relatively low in toxicity and have low environmental impact. Borate insecticides, such as Bora Care and Timbor have many uses in structural pest management and are very safe compared to older conventional pesticides (see Bora Care Insecticide and