Many, if not most, currently used pesticides are rapidly decomposed, broken down or inactivated by alkaline conditions (high pH). Numerous pesticide labels bear warnings against mixture with alkaline materials such as lime. Alkaline can also accelerate the decomposition of many pesticides. The rapidity of the pesticide decomposition depends on the nature of the pesticide and the degree of alkalinity. Additionally, alkalinity is of little or no significance in the absence of water.

Certain pH adjusters can be used to reduce the alkalinity of spray water and they are frequently used to advantage. However, the problem can often be solved by applying a spray immediately after mixing and during conditions that favor rapid drying of the spray deposit. Incidentally, this is usually the best practice even in the absence of pH problems.

pH and Pesticides