

# Analysis of Chelated Minerals on Brassica rapa and Raphanus sativus as a Post-Germination Fertilizer

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Minerals are a key source of nutrients for your bodily functions. Chelates are a new and upcoming concept of minerals in the health and medical field. Chelated minerals are minerals that have been combined chemically with amino acids to form “complexes.” These minerals are used in the medical field due to their ability to be absorbed quickly. This research looks at how chelated minerals could possibly be used as a crop fertilizer under certain conditions. Chelated zinc and copper were the minerals used as additives and were compared to plain zinc and copper at the same concentrations. A negative control was distilled water. The plants used were Brassica rapa and Raphanus sativus. The seeds were placed in plant trays containing untreated compost as soil and allowed to germinate. Plants were housed indoors with grow lights in temperature-controlled conditions. The fertilizer mixtures were made with water and added to the plants following germination. Plants were evaluated through multiple leaf and flowering stages. The trial results showed that plants in the chelated fertilizer groups showed a slight increase in growth rates among other trial groups. Flowering times and patterns were similar among all groups. Color differences were noted among groups with negative controls having more yellow colored leaves than the chelated mineral groups.