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|  |  | ***Abstract***  Since 1979, the effects of extremely low-frequency (ELF) electromagnetic fields (EMFs), such as those created by high-voltage power lines, on human beings and animals have been the subjects of heated debate and controversy. On the other hand, plants have received little attention. For this reason, we tested the effects of ELF EMFs on the physiology of plants.  Our test subject was *Brassica rapa*, a mustard, chosen for its relatively short seed-to-seed life span. It was grown from seeds for 43 days until the seedpods were mature. In 1996, Mark Davies, a British scientist, tested the effect of EMF on mustard for only nine days; our experiment was continued for the plant’s full life cycle. Experimental plants were exposed 24 hours a day to a 39-gauss (G) field fluctuating at 60 hertz (Hz). Control plants were exposed to the same environment; they received the same amount of (electrically-produced) heat and (artificial and natural) light, but without an ELF EMF. Seeds were harvested for future second-generation, 21-day, experiment and biochemical analysis.  During early growth, a difference was observed in the color of the plants, the experimental subjects being of a lighter green than the controls. After 43 days (when the plant’s life cycle ended), weight, height, leaf width, leaf length, root length, pod length, and pod weight were measured. Statistically significant (p<5%) physiological differences were observed in the seedpods, which exhibited abnormal growth and shriveling in experimental plants, as shown in the pictures below. The investigation clearly shows that ELF EMFs do affect B. rapa.    ***Experimental                                Control*** [**Back to Top**](http://docs.google.com/Default.htm#top) |