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Killed By Campers: The Effect Of Dish Soap On Plants

Campers often throw their used dishwater onto the wild plants. I tested to see if the effect of dishwater on plants was greater when using standard dishwashing soap than when using biodegradable soap. I planted twenty-four Envy soybeans, divided into three groups. I watered a control group of plants with simply water. Another group of soybeans was given water containing Campsuds, advertised as a “biodegradable, multi-purpose cleaner”. It is designed especially for campers and backpackers. The final group was watered with water containing Ajax dish soap, a common soap sold at many stores. Every day, for four and a half weeks, I recorded observations of the plants and measured each bean’s growth. The results showed that the pure water group did the best and the six plants that grew were tall, healthy and green. The group watered with a Campsuds solution grew much less than the pure water control group of plants, but still produced four plants which were short and had small, waxy leaves. The Ajax-watered plants did very poorly. None of the plants grew over 1.2 cm and the four plants which sprouted never developed leaves. They were also the first group to shrivel and die. I was surprised that the Campsuds affected the plant’s growth so drastically because I assumed biodegradable soap would have a minimal impact on the soybeans. Overall, it was a successful experiment which yielded useful results. Campers should carefully consider what products they use and how they dispose of the waste.