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Methane Mystery

The purpose of the researcher's project was to test cattle manures from 3 different operations to see how much methane is given off, so the researcher could find effective ways to reduce methane by changing a cow's ration. The operations that the researcher collected manure from to test is dairy cattle, pasture, and feedlot cattle operations. Also the researcher added in organic compost along with a control. The researcher hypothesized that the dairy cattle manure would give off the most methane, followed by feedlot, pasture, and organic compost. After collecting manure samples, each sample was tested for nitrate and phosphate concentration to see if there is a connection with that and methane production. Also, methane was captured from each sample in a balloon and was measure for volume and circumference. For the researcher's conclusion, he would discover through testing nitrates, phosphates that over all the organic compost had the highest results compared to the three different types of manures. From the methane production the researcher also found a discovery that the dairy cattle manure would give off the most methane, therefore it would have the most impact on the environment.