Spixhaust

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Inhaling carbon monoxide can be fatal. Therefore, the invention of SPIXHAUST, a filter that can absorb carbon monoxide efficiently in the exhaust system can overcome this problem. Based on NASA website, Spider Plant is the best plant that can absorb carbon monoxide . For our first experiment , we put the dried Chlorophytum comosum that has been cut into smaller pieces into the biofilter.Then, we inserted bus smoke that we have collected and we measured the rate of absorption of carbon monoxide by using carbon monoxide detector, and it is proven that 15g of Spider Plant can absorb 100 % of carbon monoxide in normal temperature. Then , we also tested SPIXHAUST in the exhaust system. We designed a cartridge and we connected it to the external engine system . We tested with a few manipulated variables such as different RPM as well as size of throttle opening and we made comparison; when using the SPIXHAUST and without using the SPIXHAUST. From our latest experiment, the highest percentage of carbon monoxide that can be absorbed is about 60%. For our future work, we also want to implement this filter in the parking lot and the chimney of factories.

Awards Won: