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ALTERNATIVE FUEL BY USING DRY LEAVES

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A B S T R A C T

In a modern world, electricity plays a major role for all the things. The things that we are uses day to day life is fan, light, television not only a home appliances. But also uses in electric train, electric scooter, etc. this above are run by electricity that electricity are produced by power plants, wind station. The major one is power plants. The power plants uses to produces the electricity by using coal as a raw material .the coal is used to burn at a high temperature and the heat produces is converted into the electricity .the coal is naturally available one the forms a like a million years ago .It takes more to get decompose and make as a coal. But nowadays the coal is getting a lower one .we planned to get an alternate for the coal so we uses dry leaves (waste one).they are compressed by the high forces to get a proper because the compressed leaves as high density compared to separate one. In this we found ash content, moisture content, volatile matter, fixed carbon, and calorific value. Then finally it's a cost efficient its natural available no need to wait like coal.

Keywords: Electricity, Power Plants, Replacing Of Coal, Cost Efficiency

1. INTRODUCTION

A force plant is a mechanical office that produces power from essential energy. Most force plants utilize one or a ton of generators that convert energy into voltage to give capacity to the electrical network for society's electrical cravings. The special case is elective energy plants, that utilization electrical marvel cells (rather than a turbine) to think of this power. The sort of essential fuel or essential energy stream that gives a force plant its essential energy changes. The most widely recognized fills are coal, petroleum gas, and uranium (atomic force). A significantly utilized essential energy stream for power age is hydroelectricity (water). Different streams that are utilized to produce power incorporate breeze, sunlight based, geothermal and flowing. Various nations get their power from various sorts of force plants. For instance, in Canada, most power age comes from hydroelectric force plants which represents about 60% of the complete power created in Canada.There are various manners by which the wealth of energy around us can be put away, changed over, and intensified for our utilization. To help comprehend the key fuel sources that will assume a significant part on the planet's future, it is needed to acquaint with a portion of the set of experiences, hypothesis, financial matters, and issues of the different sorts of energy. The fuel sources have been part into three classes: petroleum derivatives, sustainable sources, and atomic sources. The non-renewable energy sources here are coal, oil, and petroleum gas. The sustainable power sources are sunlight based, wind, hydroelectric, biomass, and geothermal force. The atomic fueled sources are splitting and combination.

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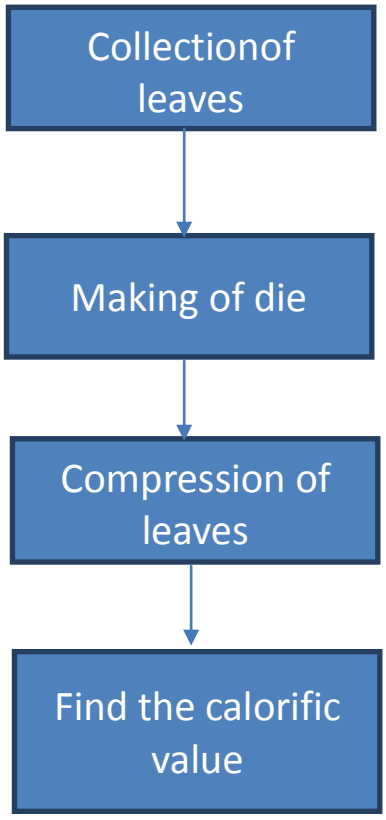
2. METHODOLOGY



In this methodology we have to collect the dry leaves and make the leaves the crushing into the small particles and adding the gum Arabic binder 20% and adding a few drops of the water and mixing the leaves and binder well. After the mixing is done , put the die into the hydraulic press machine and pour the mixing into the die and give the load on the die at 60pcal after that leave it for 5mins at a constant load and release the load slowly and remove the die and give sunlight to the compressed leaves because we use water for binding the leaves and binder after the few hours the water drops are vapor and then find the calorific value for the compressed leaves by using the help of bomb calorific meter

3. Result and Discussion

S.No	Parameter	Result	Weight
1.	Ash content	9.5%	100g
2.	Moisture content	8.0%	
3.	Volatile matter	10.5%	
4.	Fixed carbon	72%	
5.	Calorific value	4254kcal	

Our project may be help for the future when the scarcity for coal is occur. The coal was getting lower and makes the demand for upcoming years that time all the power plants are going to search the alternative for the coal that time leaves can help them. The leaves are natural available in the earth and no need for waiting time compared to coal because the coal is formed by million years ago. And also the mining cost for the low is reduced.

4. CONCLUSION

As we conclude that the dry leaves has low calorific value compared to the coal. Coal has the calorific value of 8000kcal but the calorific value of the dry leaves has half of the value of the coal value. The calorific value of the dry leaves is 4252kcal. Its may be low calorific value when they compared to coal. It is cost effective. When we collect the coal from the earth crust we have to spend more time and more cost but the dry leaves are easily available in the earth. We add the binder called Gum Arabic may be the this binder has affect the calorific value of the leaves. In future anyone may change the binder it gives the more calorific value. It is also not only for the power plant raw material and also for vehicles. After the petrol will empty the resources the vehicle may modified for the usage of leaves as a fuels in future

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