

Nutritional value evaluation on palm kernel cake (PKC) was conducted using *Candida utilis*. Experiment was assigned to Completely Randomized Design with two treatments, with fermentation and non-fermentation. Fermentation was carried on at 36°C for two days. Result showed that fermentation increased crude protein level of palm kernel cake from 22.18% to 26.07%, while NFE level diminished from 15.82% to 6.36%. Crude fiber increased not significantly in PKC and Fermented PKC namely 37.43% and 37.84%, respectively. Crude fat decreased insignificantly, in that crude fiber of PKC and fermented PKC was 9.13% and 8.89%, respectively. Ash was 9.13% and 8.89%, respectively, and mannose increased insignificantly as much as 2.19% and 3.56%. Fiber volume fraction undergoing significant increase was hemicellulose, from 21.12% to 22.93%, while cellulose insignificantly increased from 38.9% to 41.13%, lignin insignificantly decreased from 21.12% to 19.18%. It was concluded that fermented Palm Kernel Cake product provided essential nutritional values for poultry (hemicellulose, mannane and mannose) that potentially improved poultry health.

A study on analysis of 2-stroke petrol engine using ethanol as an additive[\[Full-Text \]](#)

Mr. Soumya Ranjan Nanda, Dr. Prof. Amitabh Biswas

This study will consist of Introduction which is based on Literature and Review and also the effects and benefits of using ethanol. After Introduction comes the Planning of the study, the third one is Analysis of results and Discussion and the conclusion is drawn. The First part is Introduction. It consists of many topics which includes introduction to ethanol and why it is used, it's chemistry. As our study is based on using Ethanol, so there are various discussions about Ethanol, its production, its properties and benefits. The Second part is planning. This consists of Equipment setup, the various Apparatus required for the Experimentation, their specification and the procedure followed. The Third part is Analysis of Results and it's Discussion. Here various Experimental results are provided and discussed elaborately on basis of Performance and Exhaust Gas Analysis. This also includes the Experimentation with the ORSAT apparatus. Finally, after the study is completed the conclusion for the study is drawn.

Evaluation of the performance of the process of nitrification in the wastewater treatment plant of Settat[\[Full-Text \]](#)

Asmaa Karboubi, Abdeljalil Zouhri and Abdellah Anouar

This research has attempted to assess the effects of operating parameters