In all case, a valorizable liquid phase has been obtained. The operational conditions were optimized at 170ºC of temperature and 0.5% sulphuric acid concentration. A liquid phase with high contents of hemicellulose derivates was obtain. More of 70% xylose from raw material (as xylan or other hemicellulose polysaccharides) can be extracted

5. Conclusion

The proposed acid hydrolysis process allows increased yield and xylan under more selective extraction conditions .and were obtain high values of superior calorific values of lignocellulosic materials studied.
The operational ranges are especially suitable for the extraction of xylose, which was virtually quantitative at 170°C. The selective extraction of hemicelluloses allows to have a solid part with a high content in glucan a lignin and the value of superior calorimetric is suitable for obtain energy**.**

Paulownia has a higher calorific value than Leucaena even for lower concentrations and same temperatures and a calorific power similar to Tagasaste.
For the three species, the higher calorific power is obtained in temperatures of 170 °C and 2% acid concentration.

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