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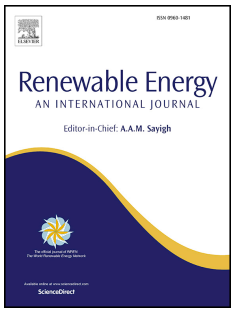

Comparative autohydrolysis study of two mixtures of forest and marginal land resources for co-production of biofuels and value-added compounds

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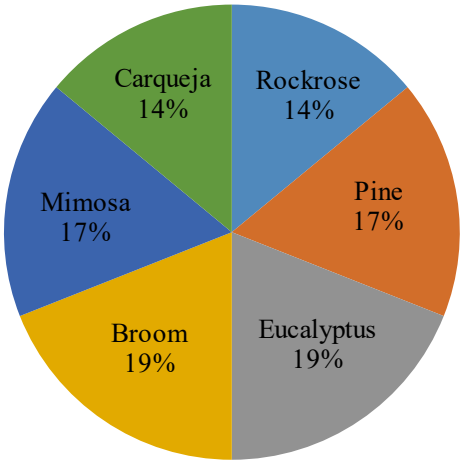

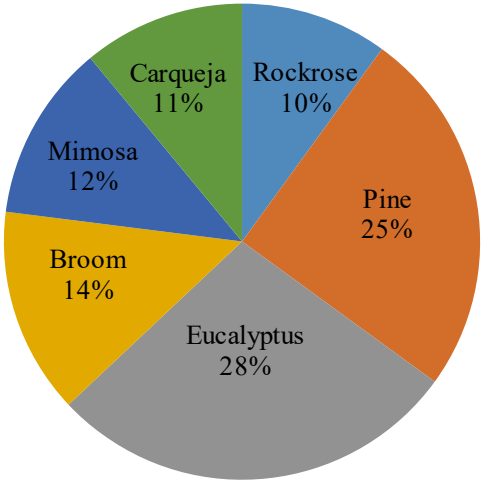

M1-4

M2-3

Water

Autohydrolysis

190 ºC/ S_0 3.71
196 ºC / S_0 3.93

206 ºC/S_0 4.15

216 ºC/ S_0 4.38
226 ºC/S_0 4.60
240 ºC /S_0 4.82

Solid fraction

Liquid fraction

Water/ Buffer

Cellic Cetec2

Enzymatic saccharification
5 % solids, 20 FPU/g

Y_{G72} **M1-4 60.2 g $_{glucose}$/g $_{M1-4}$**
M2-3 60.2 g $_{glucose}$/g $_{M2-3}$

Energy production
High Heating Values
(HHVs)

HHVs M1-4 19.6 Mj/Kg
M2-3 19.1 Mj/Kg

Xylo-oligomers M1-4 9.4 g/ L Xylose 4.7 g/L (62.2 % Xylan recovery)
M2-3 14.3 g/L 2.1 g/L (68.6 % Xylan recovery)