

Characteristics and heating values of pellets made from raw and charred rice residues-rubber tree twigs mixture

ABSTRACT

In this study, the characteristics and heating values of raw pellet (RP) and charred pellet (CP) made from rice residues-rubber tree twigs mixture were compared. The carbonization process to produce the charred plant residues was conducted in a locally fabricated stainless steel kiln. Both the RP and CP were evaluated for their heating values, pellet durability, carbon and inorganic ash content. The CP had higher heating value and carbon content than the RP. However, the ash content of CP was higher. The results indicate that the pellet made from the charred rice residues-rubber tree twigs mixture could be a suitable source of renewable fuel.