

TANZANIAN GRASS (HAY) REPORT ON SHREDDING AND BRIQUETTING TESTS

Date: 02.04.2011

Place: ASKET, Biomass Division in Gniewkowie

Tested material: grass from Tanzania, rice husks, grass moisture content 12% - 14%

Technology: briquetting set BIOMASSER® SOLO-SET:

- shredder RK 7,5 kW, screen 15 mm, standard blades
- briquetting press BIOMASSER® SOLO type BS06

SHREDDING

- Tanzanian grass manual loading into shredder chamber
- Chopped material moisture content 12% - 14%
- High dusting, having characteristic (exotic) smell, occurred while chopping the grass (hay). Dusting was reduced by closing the air inlet.
- Textile cover mounted on BIOMASSER® briquetting press container requires often cleaning by shaking it off (beating) in order to remove the particles that block the textile holes.



Manual shredder feeding



Chopped Tanzanian grass

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BRIQUETTING TANZANIAN GRASS WITHOUT RICE HUSKS

Productivity of the set: 47 kg/h – 62 kg/h

Good quality briquettes.



BIOMASSER® SOLO-SET used for trial



Tanzanian grass briquette inside rod guide



Tanzanian grass briquettes



1 m long briquette weights 2,60 kg

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BRIQUETTING TANZANIAN GRASS WITH RICE HUSKS

Productivity of the set: 63 kg/h – 69 kg/h

Briquettes good quality.

Suggested adding 20 dm³ of rice husks per one hour of continuous briquetting.



Rice husks putting into bucket



Briquette from Tanzanian grass mixed with rice husks

Photo on the left: Polish Word "Z ŁUSKĄ" means „WITH HUSK”

CONCLUSIONS

Positive result of briquetting Tanzanian grass is BIOMASSER® technology.

Moreover we received good briquettes from Tanzanian grass mixed with rice husks.

We suggest to add rice husks in amount 20 dm³ per one hour of continuous briquetting.

The good experience of adding rice husks make us think they can be also added to other grass type materials and straw with the same good result.

Problem of dusting that occurred while chopping was solved by closing the air inlet.

Results for Tanzanian grass:

- good quality briquettes from Tanzanian grass with and without rice husks
- **1 meter of Tanzanian grass briquette weights 2,60 kg**
- **Tanzanian grass is 10% lighter than rye straw - cereal straw.**