

**PENGARUH UMUR PANEN DAN LEVEL PUPUK NITROGEN
TERHADAP PRODUKSI DAN KANDUNGAN NUTRIEN
Sorghum bicolor (L.) MOENCH VARIETAS
BROWN MIDRIB RESISTANCE**

**Damar Luh Buono Sejati
14/366688/PT/06788**

INTISARI

Sorgum merupakan tanaman pakan yang berpotensi dikembangkan pada daerah kering yang ada di Indonesia. Penelitian ini bertujuan untuk mengetahui pengaruh umur panen dan level pupuk nitrogen terhadap produksi dan kandungan nutrisi tanaman sorgum varietas BMR. Penelitian ini menggunakan rancangan split blok. Blok utama yaitu umur panen yang terdiri dari U1 (50 hari), U2 (60 hari), dan U3 (70 hari). Sub blok yaitu level pupuk nitrogen yang terdiri dari P1 (0 kg/ha), P2 (100 kg/ha), dan P3 (200 kg/ha). Masing-masing perlakuan dilakukan 3 ulangan. Data dianalisis dengan analisis variansi dan beda antar rerata diuji dengan Duncan's Multiple Range Test (DMRT). Hasil penelitian menunjukkan bahwa produksi tanaman dipengaruhi nyata oleh umur panen dan level pupuk. Kandungan BK, BO, SK, PK, dan TDN dipengaruhi nyata ($P < 0,05$) oleh umur panen berbeda, sedangkan kandungan LK dan BETN tidak dipengaruhi nyata oleh umur panen berbeda. Kandungan BK, SK, PK, dan TDN dipengaruhi nyata ($P < 0,05$) oleh pemberian level pupuk berbeda, sedangkan kandungan BO, LK, dan BETN tidak dipengaruhi nyata oleh pemberian level pupuk berbeda. Kadar PK pada umur panen 50 hari (6,47%), 60 hari (7,26%), dan 70 hari (6,43%) Kadar PK level pupuk 0 kg/ha (5,43%), level pupuk 100 kg/ha (6,72%), dan 200 kg/ha (8,01%). Disimpulkan bahwa umur pemanenan yang semakin tua mampu meningkatkan produksi dan kandungan serat kasar tanaman sorgum BMR tetapi tidak meningkatkan kandungan protein kasar. Peningkatan level sampai level 200 kg/ha dapat meningkatkan produksi tanaman sorgum BMR dan meningkatkan kandungan protein kasar.

(Kata kunci: Sorgum BMR, Umur panen, Level pupuk nitrogen, Produksi, Kandungan nutrisi)

EFFECT OF CUTTING AGE AND FERTILIZER LEVEL ON THE PRODUCTION AND NUTRIENT CONTENT OF *Sorghum bicolor* (L.) MOENCH VARIETIES BROWN MIDRIB RESISTANCE

**Damar Luh Buono Sejati
14/366688/PT/06788**

ABSTRACT

Sorghum is a potential feed crop that can be developed on dry lands in Indonesia. The study was conducted to know the effect of cutting age and nitrogen fertilizer level on the production and nutrient content of *Sorghum bicolor* L. varieties BMR. This study was designed in split block model design. The main block was cutting age consisted of 3 level which is U1 (50 days), U2 (60 days), and U3 (70 days). The sub block was nitrogen fertilizer level consisted of 3 levels which were P1 (0 kg/ha), P2 (100 kg/ha), and P3 (200 kg/ha). Each treatment performed 3 replications. Data was analyzed with analysis of variance and the difference between means was analyzed by Duncan's Multiple Range Test (DMRT). The result showed that plant productions were significantly influenced by cutting age and nitrogen fertilizer level. The result also showed that DM, OM, CF, CP, and TDN were significantly influenced ($P < 0,05$) by the harvest age, however EE and BETN were not significantly influenced. Meanwhile DM, CF, CP, and TDN were significantly influenced ($P < 0,05$) by nitrogen fertilizer level, however OM, EE, and BETN were not significantly influenced. CP on the age of harvest 50 days were 6,47%, 60 days (7,26%), and 70 days (6,43%). CP on the nitrogen fertilizer level 0 kg/ha (5,43%), 100 kg/ha (6,72%), and 200 kg/ha (8,01%). The conclusion of the study was increasing cutting age can increased plant production and crude fiber content, but decreased the crude protein content. The application of 200 kg/ha nitrogen fertilizer level can increased the production and crude protein content.

(Keywords: *Sorghum bicolor* L., Cutting age, Nitrogen fertilizer level, Production, Nutrient contents)