

◆ Research Paper

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Performances of Improved Lablab Varieties for their Agronomic characteristics and chemical compositions in Adola sub-site of Bore Agricultural Research Center

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Abstract: A study was conducted with the objective to identify adaptable and chemical composition of Lablab varieties. Three Lablab Beresa-17, Gabis-55 and Local variety +were tested in randomized complete block design (RCBD) with three replications. The result revealed that date of maturity was significantly ($p < 0.05$) differ between the tested treatments. Among the tested varieties Gabis-55 was took longer day (144 days) while, the local varieties required the short (129.2 days) to reach for seed maturity. Fresh biomass yield, seed yield, plant height, pod per plant and pod length were not significantly ($p > 0.05$) differ among the tested varieties. The analyzed chemical compositions indicated, Beresa-17 variety had the highest in Organic matter (OM), crude protein (CP), neutral detergent fiber (NDF) and dry matter (DM) and less in acid detergent fiber (ADF), acid detergent lignin (ADL), and total ash content (TASH) content while, Gabis-55 was highest in acid detergent lignin (ADL) and acid detergent fiber (ADF) and less in crude protein (CP) content. The local variety had the highest in neutral detergent fiber (NDF) and total ash content (TASH) and less in dry matter (DM) content than the rest varieties. The result of this study implied that Gabis-55 variety was adapted and being productive regarding the plant height, biomass yield and seed yield of each variety, which is hopeful to fill the gap of low quantity feed. In addition to the nutritional values were promising particularly the crude protein (CP), Dry matter (DM) and Organic Matter (OM) content in Beresa-17 variety. Based on its adaptability, high biomass

yield, high seed yield, good CP, DM and OM of Gais -55 is recommended for further promotion in the midland of East Guji zone.

Keywords: Adola; Chemical composition; Lablab; Nutritive value



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