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**Volume 5 (2); March 25, 215****Research Paper****Vegetable peels: a promising feed resource for livestock.**

Hossain M.E., Sultana S.A., Karim M.H. and Ahmed M.I.

*Online J. Anim. Feed Res.*, 5(2): 33-39, 2015; pii: S222877011500006-5**Abstract**

The study was undertaken to find out the chemical composition of different vegetable peels available in Rangunia, Chittagong, Bangladesh. Total 10 different vegetable peels i.e., Banana blossom (*Musa sapientum*), Bottle gourd peel (*Lagenaria siceraria*), Brinjal peel (*Solanum melongena*), Gram husk (*Cicer arietinum*), Green banana peel (*Musa sapientum*), Green coconut peel (*Cocos nucifera*), Pea husk (*Pisum sativum*), Potato peel (*Solanum tuberosum*), Pumpkin peel (*Cucurbita maxima*), Ripe banana peel (*Musa sapientum*) were collected from the study areas. Samples were collected, chopped and tested immediately for moisture content and remaining samples were sun-dried and processed using standard procedure. Chemical analyses of the samples were carried out in triplicate for Dry matter (DM), Crude protein (CP), Crude fiber (CF), Nitrogen free extracts (NFE), Ether extracts (EE) and Ash. Results indicated that, crude protein content in Banana blossom was 13.8 g/100g, Bottle gourd peel 7.0 g/100g, Brinjal peel 12.3 g/100g, Gram husk 4.5 g/100g, Green banana peel 7.0 g/100g, green coconut peel 4.9 g/100g, pea husk 6.2 g/100g, Potato peel 13 g/100g, Pumpkin peel 16.5 g/100g and Ripe banana peel 6.8g/100g. In addition to crude protein, all samples contained substantial amount of crude fiber, nitrogen free extracts, ether extracts and ash. It could therefore be inferred that, the vegetable peels might be an alternative to conventional feeds for livestock of the developing countries.

**Keywords:** Ash, Crude Fiber, Crude Protein, Ether Extract, Moisture, Nitrogen Free Extract, Vegetable Peels.[Full text-PDF](#) [XML](#) [DOAJ](#)**Research Paper****Nutritive value of water hyacinth (*Eichhornia Crassipes*).**

Hossain M.E., Sikder H., Kabir M.H. and Sarma S.M.

*Online J. Anim. Feed Res.*, 5(2): 40-44, 2015; pii: S222877011500007-5**Abstract**

The study was undertaken to find out the chemical composition and nutritive value of Water Hyacinth (*Eichhornia crassipes*) available in Chittagong, Bangladesh. *Eichhornia crassipes* samples were collected from three different remote places of the study area. Chemical analyses of the samples were carried out in triplicate for dry matter (DM), crude protein (CP), crude fiber (CF), nitrogen free extracts (NFE), ether extracts (EE) and total ash (TA) in the animal nutrition and poultry research and training centre (PRTC) laboratory, Chittagong Veterinary and Animal Sciences University, Chittagong, Bangladesh. Metabolizable energy (ME) was estimated mathematically for all samples by using standard formula. Results indicated that, there were no significant variations ( $P>0.05$ ) in the DM, CP, CF, NFE, EE and TA contents of the samples collected from different places. DM content varied from 8.7 to 9.3 g/100g, CP content varied from 10.1 to 11.2 g/100g, CF content varied from 26.1 to 27.4 g/100g, EE content varied from 1.1 to 1.8 g/100g, NFE content varied from 47.2 to 50.2 g/100g and TA content varied from 12.3 to 12.4 g/100g. Similarly, metabolizable energy (ME) content also varied from 1999.7 to 2054.1 Kcal/kg DM. It could therefore be inferred that, the nutrient contents of *Eichhornia crassipes* does not vary due to variation in geographical location. Nutritionally, *Eichhornia crassipes* seems sound enough to be utilized as feed for livestock especially during scarcity period.

**Keywords:** Chemical Composition, *Eichhornia crassipes*, Metabolizable Energy, Nutritive Value.[Full text-PDF](#) [XML](#) [DOAJ](#)**Research Paper****Performance of rabbits on exclusive day and/or night feeding regime in the derived savannah zone of Nigeria.**

Ojebiyi O.O, Olarinde O. J., Adepoju A. A., Akinola A. O. and Adetutu O. I.

*Online J. Anim. Feed Res.*, 5(2): 45-49, 2015; pii: S222877011500008-5**Abstract**

This study was carried out using Twenty four growing rabbits with an average initial weight of between 667 - 676 g. The rabbits were randomly allocated into three groups of eight rabbits each, with each rabbit serving as a replicate in a completely randomized design experiment. The rabbits were fed conventionally on concentrate (100g) and fresh forages – *Aspilia africana*- *Tndax procumbens* (200g) per animal per day. The first group which served as the control were provided with feed and water ad libitum while the second group (day feeding) were fed once during the day (08:00 hrs) and provided with only water at night. The third group (night feeding) were fed once in the evening (06:30 hrs) and provided with water during the day. The experiment lasted for eight weeks. Parameters recorded were temperature and humidity of the rabbitary, rectal temperature of the rabbits, feed intake and left over, water consumption, weight gain as well as the pulse rate of the rabbits. Rabbits on exclusive night feeding had final weights (1.62 kg) comparable ( $P>0.05$ ) with the control (1.58 kg) that were fed ad-libitum (day and night) and higher ( $P<0.05$ ) than the weight of rabbits (1.48 kg) fed exclusively during the day. Feed wastage was much lower ( $P<0.05$ ) in rabbits fed exclusively at night. The relative organ weights shows that the kidney, spleen, and intestinal weights were not affected ( $P>0.05$ ) but there were differences ( $P<0.05$ ) in weights of lungs, heart and liver for the feeding regimes. It can be concluded that feeding rabbits at night is better to take advantage of their nocturnal habit. This will encourage the participation of individuals whose schedules are busy during the day in rabbit meat production thus making more rabbit available for consumption.

**Keywords:** Concentrate, Feed Intake, Feed Wastage, Forages, Nocturnal Habit, Weight Gain.[Full text-PDF](#) [XML](#) [DOAJ](#)

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## Research Paper

### **Effect of feeding different levels of *Moringa oleifera* leaves on performance, haematological, biochemical and some physiological parameters of Sudan Nubian goats.**

Babeker E.A. and Abdalbagi Y.M.

*Online J. Anim. Feed Res.*, 5(2): 50-61, 2015; pii: S222877011500009-5

#### **Abstract**

The present study was designed to investigate the effects of feeding different levels of *Moringa oleifera* leaves on the performance, haematological, biochemical and some physiological parameters of Sudan Nubian goats on three different levels of *Moringa oleifera*, group A (0%) As control, group B offered (20%) and group C (50%) fed different levels of *Moringa oleifera* leaves. Thirty yearling females of Nubian goats weighted between 16.00 - 24.00 kg and their age was nearly 10 - 12 months were used in this study, the animals were divided according to their live body weight into three groups of ten each, goats were housed in pens of suitable size and were managed as any other commercial goat flock ...[read more](#)

**Keywords:** *Moringa oleifera* Leaves, Performance, Blood Hematology, Blood Biochemical, Physiological Parameters and Nubian Goats.

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## Research Paper

### **A study of management, husbandry practices and production constraints of cross-breed dairy cattle in South Darfur state, Sudan.**

Hamza A.E, Eltahir S.S, Hiam M.E. and Makarim A.G.

*Online J. Anim. Feed Res.*, 5(2): 62-67, 2015; pii: S222877011500010-5

#### **Abstract**

The present work was prepared to evaluate the management applied, husbandry practices and the constraints facing crossbreed dairy cattle owners in South Darfur state, Sudan. Structured questionnaire was designed to collect the data, and the analysis was performed using frequencies and descriptive statistics. The results showed that graduated persons among dairy farm owners in Mossay district represent the majority (35%) then those of higher secondary certificate (25%) and those passing the intermediate school were (10%) where the rest of the producers were illiterate (5%). It was found that crossbreed dairy farms in Mossay district was established during few last years; (55%) of the producer established their farms in a period more than 10 years, while 40% of the respondent claimed that they started investment in milk production in a period ranging between 3-8 years, only 5% of the herd owners replied that they involved in milk production...[read more](#)

**Keywords:** Management, Husbandry Practice, Constraints, Crossbreed, Dairy Cattle, South Darfur, Sudan.

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