



MINISTRY OF AGRICULTURE, LIVESTOCK AND IRRIGATION
DEPARTMENT OF AGRICULTURE
IN-SERVICE TRAINING CENTRE AND
STATE AGRICULTURAL INSTITUTE DIVISION



Study on Growth Performance of broiler with different commercial compound feeds



Daw Khaing Thazin Htun

Demonstrator

State Agriculture and Livestock Institute

(Pyinmana)

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INTRODUCTION



Poultry production



important socioeconomic roles in developing countries



began breeding in Southeast Asia, including Myanmar

(Birhanu et al.,2021)



Broiler

- ✓ provides a source of income for small businesses
- ✓ no need a lot of investment and space
- ✓ Good feed quality - 100% important (Ike, 2011)



Poultry Feed

- about 70 % of feed demand comes from the poultry sector
- most important input for intensive poultry production
- availability of low-cost, high growth rate and high-quality feed - critical in the poultry industry (Abdulrahman et al., 2022)



chicken's meat growth rate and egg production rate depend on feed



poultry feed industry - closely connected to the primary agricultural production



forms an essential component of the food chain (Bell, 2001)

Problem Statement

1. Roughages



2. Concentrates



3. Mixed Feed



Concentrate feed

- ✓ benefit for growth & health of chickens
- ✓ protect the chickens against diseases and infections

**Two types of concentrate feeds:
carbonaceous &
proteinaceous**



OBJECTIVES



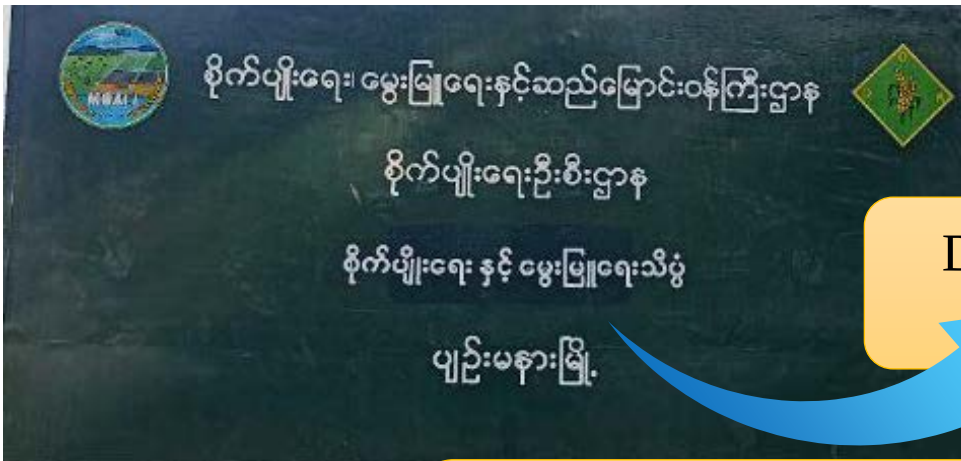
To study the growth performance of broiler with different commercial broiler feeds



To know the suitable FCR for poultry production

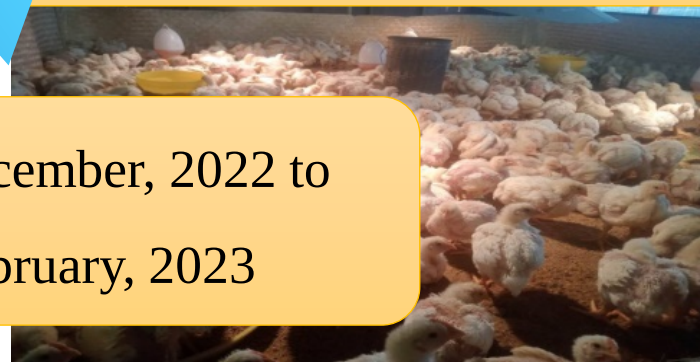


Materials and Methods



Department of Animal Husbandry, SALI
(Pyinmana)

Duration – 4th week of December, 2022 to
1st week of February, 2023



Materials Required

- Chicks
- Feeder/ drinker
- Light bulb
- Bucket
- Feed
- Digital balance
- Bamboo
- Lime
- Thermometer
- Enrotril
- Multivitamin ADEK 126

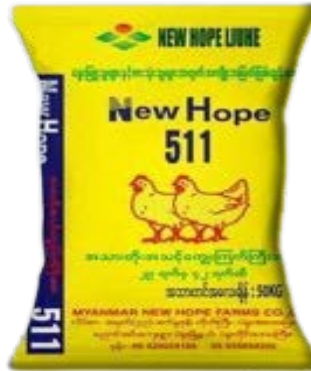


Treatments

T1 = CP



T2 = New Hope 1



T3 = New Hope 2



T4 = De Heus



New Hope 1= 511

New Hope 2= 510 + 511

Brooding Stage

- Firstly, prepare brooding room for broiler
- 7 ft wide brooding room from 1 to 13 day (500 chicks)
- 14th day, the width of the brooding room is expanded to around 14 ft



Care and management

- (1 -14) days - starter feed
- (15 - 21) days - grower feed
- After 21 days - finisher feed
- Mix (1) spoon of glucose with (1) gallon of water (hot season)
- Multivita – ADEK 126 with drinking water in the morning
- 14 days and 28 days - IBD vaccination
- Heating with heat bulbs or campfire if chickens are cold



Care and management

- ❖ Opening the side plastic tarpaulin sheet for good ventilation (afternoon)
- ❖ Too hot, sprinkle water on the chicken
- ❖ When feeding chickens, wake up and feed
- ❖ Covering the yard in the evening with plastic tarpaulin sheet



Parameters and Data Calculation



Daily Weight Gain
(Viss)



Feed Cumulative Intake



Feed Conversion Ratio (FCR)



Daily Feed Intake (Viss)

$$\text{FCR} = \frac{\text{Total CUM Intake}}{\text{Total body weight}}$$

FCR = Feed Conversion Ratio

CUM Intake = Feed Cumulative Intake

Data were calculated by using Microsoft Excel.



Results and Discussion

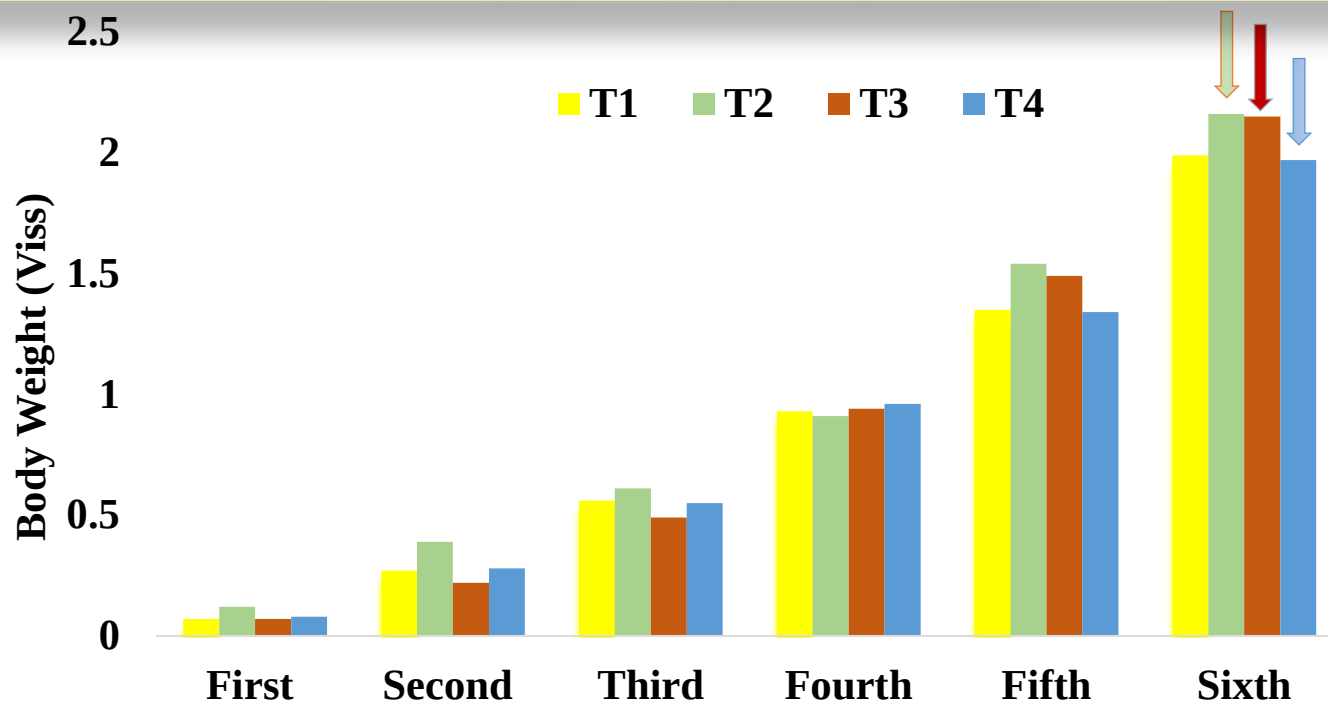
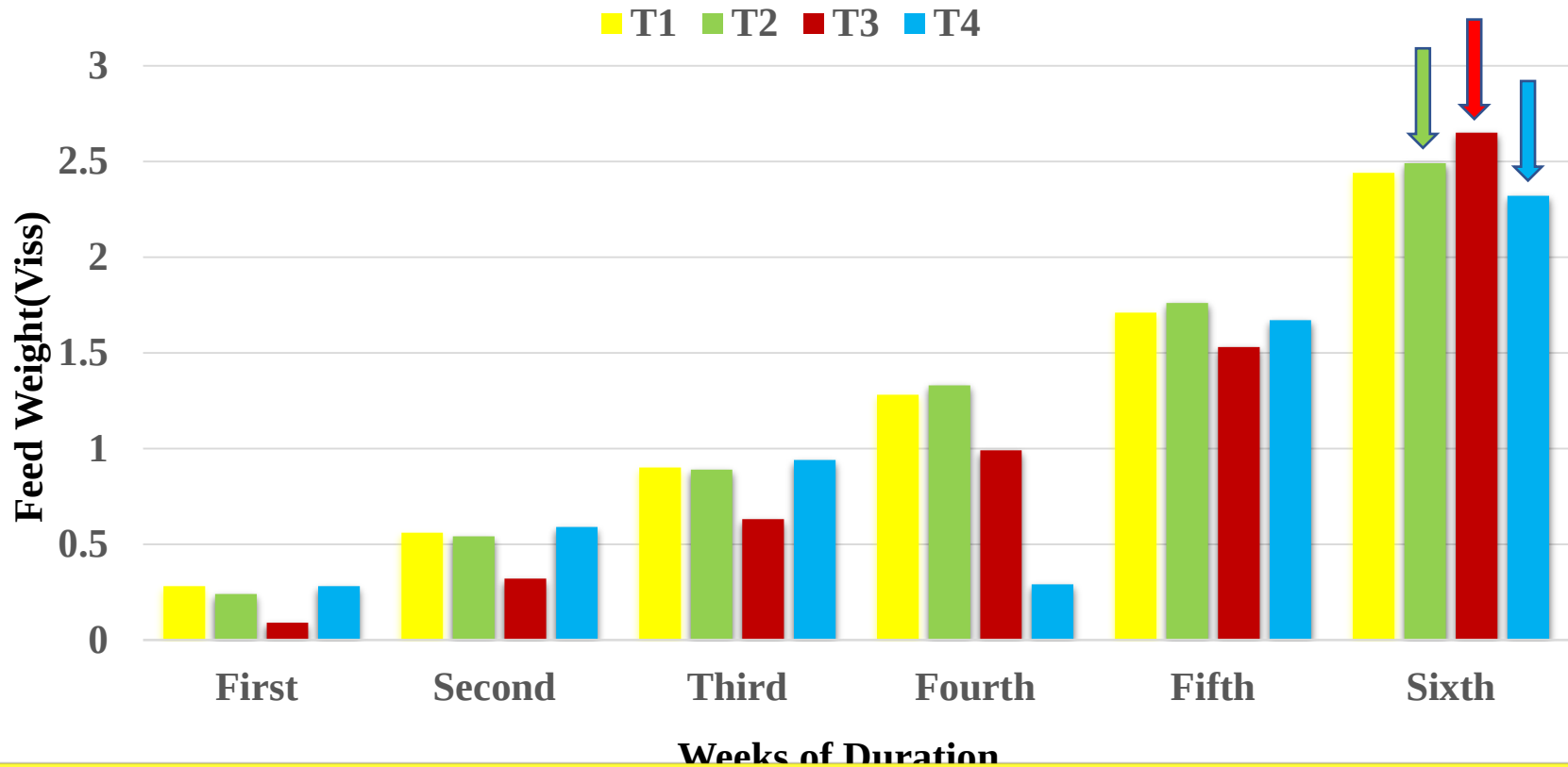


Figure 1. Average weekly body weight gain of broiler

Low protein diet leads to poor performance (Hussein et al.,2001).



The average feed intake per weeks was increased significantly with the advancement of ages (McMinn et al., 2000).

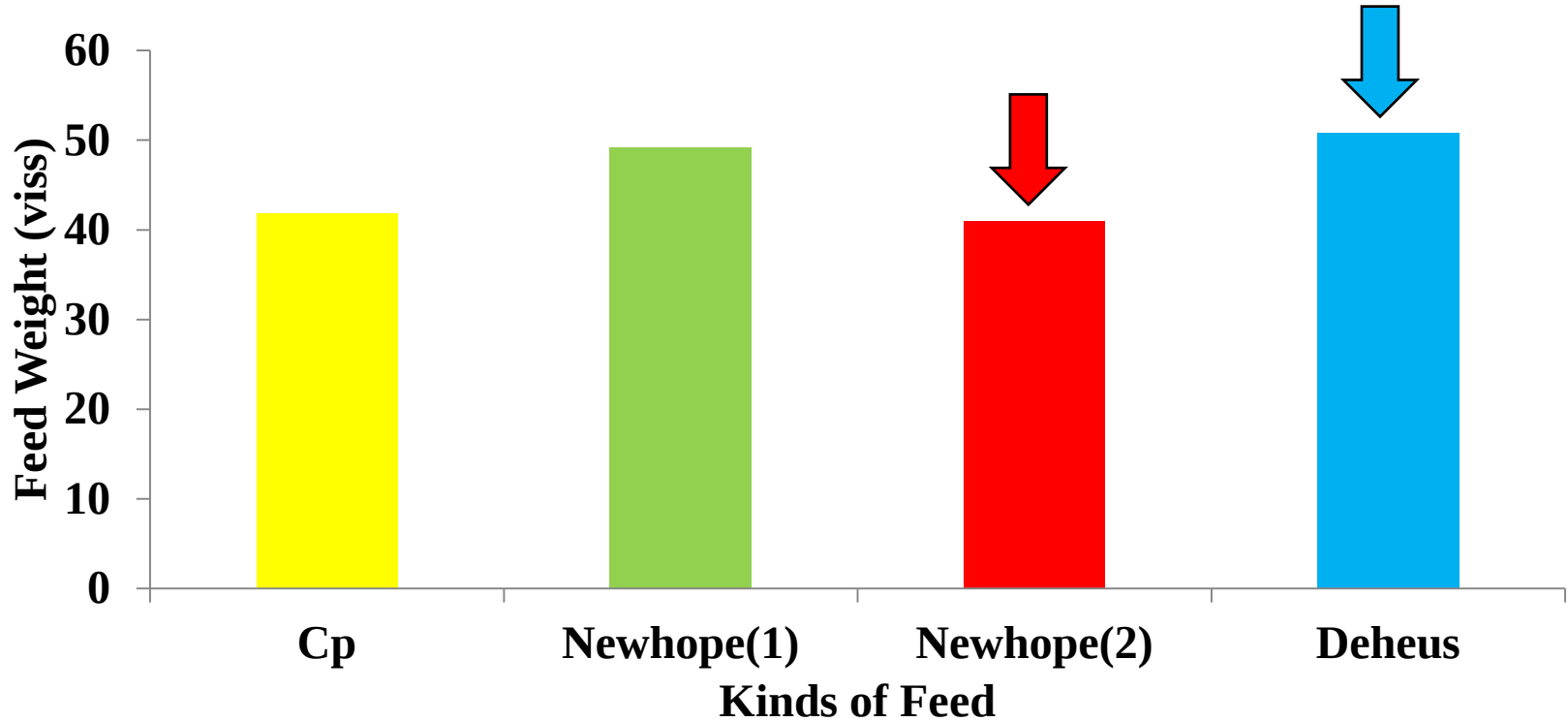
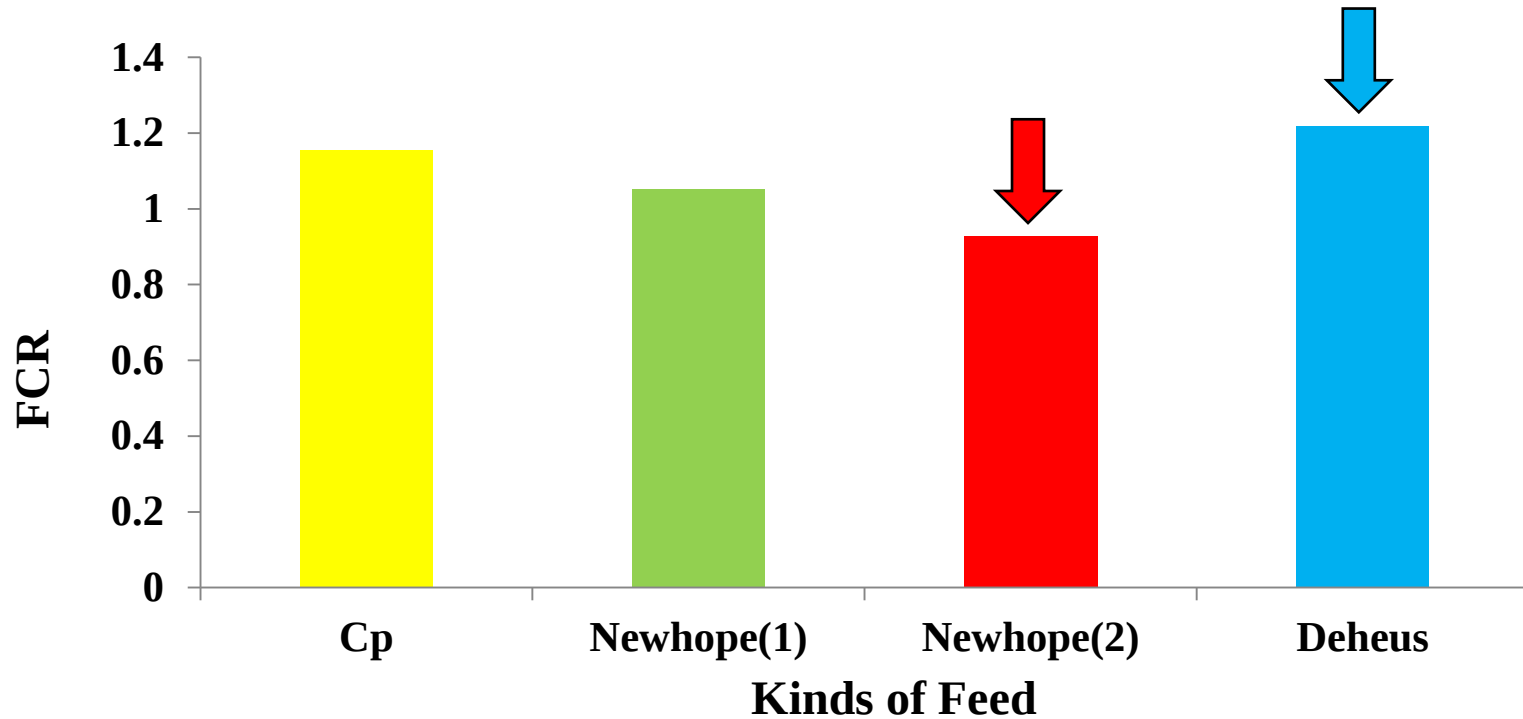


Figure 3. CUM intake comparison of broiler



Lowered or poor FCR in protein based diets may possibly be due to less feed intake than other treatments(Raju et al.,2003).

Cost and Benefit of four treatments of broiler production as affected by different commercial feed

Treatment	Cost of chicks (MMK)	Cost of feed (MMK)	Total (MMK)	Profit from selling chicken(MMK)	Profit (MMK)
T1	28500	78000	106500	124500	18000
T2	28500	70000	98500	120000	21500
T3	28500	75000	103500	126500	23000
T4	28500	70800	99300	115000	15700



Conclusion



- Body weight comparison the highest body weight in T2 (New Hope -1)
- Highest total feed intakes - T4 (Dehus)(50.76 viss) & lowest - T3(New Hope - 2) (40.98 viss)
- Highest FCR (1.21) in T4, lowest FCR (0.93) in T3
- FCR means lower number is better
- T3 (New Hope - 2) - better than other treatments



Future Plan



- နောင်လာမည့်စာသင်နှစ်တွင် ကြက်မွေးမြူရေးအထူးပြုဘာသာရပ်အတွက် အသားစားကြက်မွေးမြူခြင်းနှင့် ပတ်သက်သည့် လုပ်ဆောင်ရမည့်အချက်အလက်များကို ကျောင်းသား/ကျောင်းသူများအား လက်တွေ့လေ့လာ သင်ယူနိုင်စေရန်
- အသားစားကြက်မွေးမြူရာတွင် သင့်လျော်သည့်အစာအမျိုးအစားကို ရွေးချယ်နိုင်ရန်နှင့် ကြက်မွေးမြူရေး လုပ်ငန်းတွင် လိုက်နာရမည့်အကြောင်းအရာများ၊ တွေ့ရှိချက်များကို မွေးမြူရေးလုပ်ငန်းစတင်လုပ်ကိုင်မည့် သူများထံသို့ ပြန်လည်မျှဝေသွားနိုင်ရန်နှင့်
- နောင်လာမည့်စာသင်နှစ်များတွင် ကျောင်းသား/ကျောင်းသူများ လက်တွေ့လေ့လာသင်ယူနိုင်ရန် ခေတ်နှင့်အညီ ပိုမိုကောင်းမွန်သောစမ်းသပ်ချက်များကို ဆက်လက်လုပ်ဆောင်သွားပါမည်။



THANK YOU



Nutrient content of commercial feed

	Fiber	Protein	Fat	Moisture
CP (911)	5%	18%	4%	13%
New Hope (511)	5%	20%	4%	13%
New Hope (510)	5%	22%	4%	14%
Deheus (6030)	5%	17%	4-8%	14%

Price of each feed ration/50kg

Treatment	CP 911 (MMK/50kg)	New Hope 511 (MMK/50kg)	New Hope 510 + 511 (MMK/2+50kg)	Deheus 6030 (MMK/50kg)	Total Feed Price
T1	78000	-	-	-	78000
T2	-	70000	-	-	70000
T3	-	-	75000	-	75000
T4	-	-	-	70800	70800
	Total				293800