PERFORMANCE OF CROSSBRED WEANED PIGLETS FED ON BOILED SWEET POTATO TUBER WITH DIFFERENT TYPES OF SOYMEAL

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NE Region

G. Area	27.49 mnha (Ar.P., AS, MN, MZ, MG, NG, SK, TR) Int. Boundaries: Bhutan, Nepal, Bangladesh, Myanmar & China
Population	40 mn (Ethnic heterogeneity)
Cultivable Land	4 mnha (Acidic Soils with 63% rain fed)
Jhum Area	1.67 mnha
Fd. Grain Prod.	6.3 mnt (Monocropping & Subsistence Agric.
Region	Fragile, undulating topography, inaccessible, ecosystem diversity
Climate	Subtropical to alpine & Av. Annual rainfall more than 2000 mm

RATIONALE

- Northeastern state account for 24.85% of swine population in India.
- Pork is the choicest meat source amongst tribal population of the region.
- The region has tremendous potential for cultivation of sweet potato and this crop occupies 17,000ha area with a production potential of 35-45 t/ha (Total Prod. 70,700t)
- Poor performance of pigs fed on raw SPT with pollution hazard

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- The region is facing an acute shortage of livestock concentrate feed (83%)
- High price and poor quality of feed especially protein feed
- Tremendous potential to grow soybean in NE region with production potential of 20-25 q/ha (Area: 9,000ha & Av. Prod.: 13.37 q/ha, National: 11.26 q/ha)

Objective:

To study growth performance and nutrient digestibility in CB piglets fed on boiled SPT with different types of soymeal

ANIMALS & FEEDING

- Used 16 CB (Hampshire x Khasi local) post weaned castrated male (9.47kg) and 12 male grower (19kg) pigs having 87.5% exotic inheritance

- Digestion trial for the period of 4 days.

- Expt. In CRD

DIETARY PLAN
(Post weaned piglets)

Treatment	T-1	T-2	T-3	T-4
Feed Composition	SESM + 0 BSPT	SESM + 40 BSPT	RFSM + 0 BSPT	RFSM + 40 BSPT
Dietary Protein (%)	18.04	18.14	18.11	18.06
Dietary DE (kcal/kg)	3004	3065	3018	3126

DIETARY PLAN
(Grower CB PIGS)

Treatment	T-1	T-2	T-3
Level of BSPT FEEDING (%)	0	40	60
Dietary CP (%)	16.78	15.90	15.40
Dietary DE (Kcal/kg)	2876	3035	3086

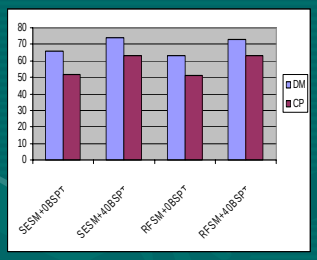
NUTRIENT INTAKE / DAY
(Post weaned CB piglets)

Treatment	T-1	T-2	T-3	T-4
DM(g)	571	594	583	601
DE (Kcal)*	1716[a]	1820[ab]	1758[a]	1880[b]
Protein (g)	103	108	106	109
DCP (g)**	53[a]	68[b]	53[a]	68[b]

NUTRIENT INTAKE / DAY
(Grower CB pigs)

Treatment	T-1	T-2	T-3
DM(g)*	1220[a]	1300[b]	1209[a]
DE (Kcal)*	3509[a]	3945[c]	3731[b]
Protein (g)*	205[b]	199[b]	186[a]
DCP (g)*	123[b]	123[b]	106[a]

NUTRIENT DIGESTIBILITY (%)
(Post weaned CB piglets)



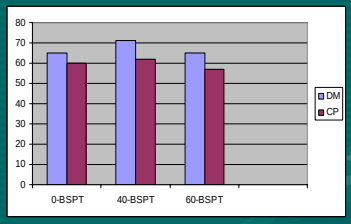
- Types of soymeal did not exhibit any significant differences on digestibility of DM & CP.
- Feeding BSPT at 40% level significantly increased DM & CP digestibility.

GROWTH PERFORMANCE
(Post weaned CB piglets)

Treatment	T-1	T-2	T-3	T-4
ADG*	204[a]	246[b]	216[a]	225[ab]
FCR	2.81	2.42	2.71	2.67

Types of soymeal did not affect growth rate and FCR value

NUTRIENT DIGESTIBILITY – CB Grower Pigs (%)



GROWTH PERFORMANCE

Treatment	T-1	T-2	T-3
ADG*	385[a]	430[b]	420[ab]
FCR	3.18	3.04	2.88

CONCLUSION

- **Boiled sweet potato tuber (BSPT) could be fed to post weaned and grower CB pigs to the level of 40 and 60 per cents, respectively of total dry matter intake (DMI).**
- **Further, resource poor farmers of NE India can utilize produced soybean grain as an efficient protein feed supplement to economize swine feeding cost.**

Enormous potential are available in northeastern region Of India to produce sweet potato and soybean feeds for Swine production

THANK YOU