

# CARE OF THE BREEDING HERD

## MYCOPLASMA PNEUMONIA

This disease is caused by the organism *Mycoplasma hyo-pneumoniae*. It is said to be the most common cause of chronic pneumonia in swine. It can be spread in the air and via direct contact.

This form of pneumonia is more seen in pigs at least three months old. They develop a chronic, dry cough, which might not be evident until they exercise. They may have a fever or lose their appetite depending on the seriousness of the infection. This disease like many others stunt growth.

In most cases antibiotic treatment is necessary; there is also a vaccine available. The disease is associated with overcrowding and poor sanitation, so avoid those conditions.

## INTERNAL & EXTERNAL PARASITE

All farms should have an effective parasite control programme. This programme will involve the use of several different Wormers and Acaricides. This is important as the over use of any chemical or compound will leads to resistance been develop over time. The rotation of chemicals with different active ingredients will therefore prevent resistance from been develop.

- See presentation for a listing of four Wormers and their main active ingredients.
- See presentation for a list of the most effective Acaricides available.

## ENVIRONMENTAL FACTORS

*Climate:* Temperature, humidity, air movement, drafts

*Social:* Group size, group composition, floor space allowance, mixing

*Physical:* Feeder design, watering design, pen cleanliness, pen layout (size, shape) air  
Air quality.

## **WASTE DISPOSAL**

As the pig industry develops the need for proper waste disposal will arise. As with most development size is important to achieve economy of scale and it is no different with pig rearing. Once more waste is generated, the greater the need for disposal. In Jamaica today the most common methods of waste disposal are;

1. Pits
2. Lagoons
3. Bio-digesters
4. Other methods such as; Composting and the spreading and or ploughing of waste into the soil can be considered.

While bio-digester is most effective, it is also the most expensive and can be 10 to 100 times more expensive than a pit or lagoon. The Scientific Research Council (SRC) is the authority on bio-digester in Jamaica any farmer who is interested can contact them as they are listed in the telephone directory.

While there is limited information on the size of pits and lagoons, we are recommending that farms with less than 20 sows use a pit and farms with 20 sows and greater use a bio-digester and a lagoon as the soak away for excess water.

## **NUTRITION**

This is a complex but important matter and who is better able than the Jamaica Pig Farmers Association (JPFA) to lead this charge. Possible the easiest thing to do is the JPFA send samples at least twice per year to Laboratory overseas for testing.

A proper nutritional programme involves the following;

1. Feeding intake
2. Productivity level, Nursery, Lactation & Gestation
3. Selection of nutrient sources
4. Feed formulation
5. Maximize quality control
6. Minimize feed wastage
7. Improve non-nutritional management- split sex feeding, all in all out system, facilities; farrowing crates, group size, water drinkers,
8. Monitor performance and cost

## **STAFFING**

A chain is as strong as its weakest link and this adage truly describes most farms in Jamaica.

- See presentation for further details.

# FEEDING OF PIGS

## OBJECTIVE

Precise control of weight gain and body condition while supporting optimal fetal development.

- Sound feeding practices that provide for adequate nutrient needs are integral to health and well-being of pigs in all stages of production.
- Feeding pigs for optimal growth and production will also provide for their nutritional welfare.
- Feeding systems consistent with the health and welfare of pigs are: feeding for ad libitum intake (feed always available) or timed (restricted) feedings.
- Automated feeding systems should allow animal's access to feeders in a manner that minimizes intimidation, bullying and aggression from other pigs.
- Food provided should be fresh palatable, and free of any gross contaminants, or physical or toxic substances or micro-organisms that could cause harm.
- Feed may be placed on a clean floor, in a trough, in individual feeders, or in a self-feeder.
- Boars and Gestating Females - Restriction of feed intake is recommended to prevent them becoming overweight. Nutritional requirements can be met by feeding sows and boars measured amounts once or twice (preferably twice) for the day.
  1. If fed once per day, feeding during the hottest part of the day should be avoided.
  2. Feeding time should be the same each day.
  3. Amount of feed given should vary according to condition, size and reproductive stage of the pigs. Adequate levels of nutrition for pregnant sows are needed to ensure normal development of the fetuses.
  4. Feeding space should be adequate in group-house sows so that all have access to feed.
  5. Consideration can be given to feeding stalls which will reduce the feed competition for feed among the group-housed sows.

## THE REPRODUCTIVE HERD-(gestating females)

1. Number of pigs born alive greater than 10
2. Birth weight greater than 1.5 kg
3. Pre-weaning mortality less than 10%
4. Number of piglets weaned per sow more than 9
5. Number of piglets produced per sow per year greater than 20.
6. Weaning weight depending on age
  - a. – at 21 days            4.5kg
  - b. – at 28 days            6.8kg
  - c. – at 35 days            9.0kg
  - d. – at 42 days            11kg
7. Number of litter per year greater than 2.2
8. Conception rate at first heat greater than 80%

## AN EFFICIENT AND PROFITABLE FEEDING PROGRAM DEPENDS

- a. GENETICS
- b. ENVIROMENT
- c. HERD HEALTH
- d. MANAGEMENT
- e. NUTRITION

### SOW'S BODY CONDITION

- BODY CONDITION AT FARROWING 3 TO 3.5
- BACKFAT THICKNESS GAIN 3 TO 5mm



**BCS = 1**  
Very thin. Hips and backbone very prominent; very flat sides; bone structure apparent.



**BCS = 2**  
Thin. Tube-shaped, but with flat sides. Hips and backbone readily felt without palm pressure; somewhat prominent.



**BCS = 3**  
Normal. Tube-shaped. Hips and backbone only felt with firm palm pressure and not visible.



**BCS = 4**  
Fat. Hips and backbone cannot be felt; tail root surrounded by fat. Tending to bulge.



**BCS = 5**  
Very fat. Bulbous. Hips and backbone heavily covered; tail root submerged. Midline appears as slight hollow between rolls of fat.

Body condition is essential for the performance of the sow; if the sow does not have a good body condition you will have reproductive problems such as;

1. low number of piglets at birth
2. low birth weight
3. low weaning weight
4. low number of weaning piglets
5. high mortality
6. low conception rate
7. high number of open days
8. a farm with some or all of the above must go under.

#### THE REPRODUCTIVE HERD-(boar)

##### OBJECTIVE

Precise control of weight gain and body condition while supporting optimal semen development.

#### ENERGY REQUIREMENT FOR SEXUALLY-ACTIVE BOAR

1. Maintenance
2. Growth
3. Mating activity
4. Semen production

**NB. Never allow a boar to gain more than 0.5-1.0lb. (0.25-0.45kg)/day**

#### THE LACTATING SOWS, WEANERS & GROWING PIGS/FINISHERS

The above classification of animals should be fed adlibitum or free choice.

**LACTATING SOWS OBJECTIVE:** To maximize milk production whilst maintaining body condition.

**WEANERS & FINISHERS OBJECTIVE:** To maximize daily lean tissue gain in order to reach market weight in the shortest possible time.