



PIG BREEDING

Considering the problem of pig breeding (or swine breeding, or hog breeding), it is necessary to understand the difference between the terms «hog», «pig», and «swine», though they are often used interchangeably for these animals.

In Britain, the term “pig” refers to all domestic swine and means an animal of the *Suidae* family kept only for meat production, while “swine” is the collection term

for pigs including both the domestic pig and its wild relatives. In the United States, the term “pig” refers to younger swine not yet ready for market and weighing usually less than 50/82 kg while others are called hogs, thus this branch of animal husbandry is often called hog breeding.

According to the British classification the young are called piglets, the young female pigs are known as gilts, the males are boars the castrated male pigs are hogs, and the mature female pigs after they have had and weaned their first litter are sows.

Swine belong to the order of even-toed hoofed animals which are further classified into the suborder of animals with 44 teeth, including two tusks for some species. Pigs have heavy, rounded bodies, short legs with cloven hooves, and small tails. All animals have a comparatively long and flexible snouts ending in a rounded disk used to dig for food. The thick but sensitive skin is partly covered with coarse bristles and shows a wide range of colour patterns. All swine including

domestic pigs are quick-footed, intelligent animals.

Pigs are well-adapted to temperate and semitropical climates and pig breeding is an important branch of animal husbandry in many different countries. Estimating the worldwide population of domestic pigs at more than 940 million, pig breeders distinguish about 300 breeds or local varieties of pigs raised throughout the world.

The animals, regardless of breed, are classified for marketing purposes as large lard types with a comparatively thick layer of fat and carcasses usually weighing at least 100 kg ; smaller bacon types with carcasses of about 70 kg , and pork types with carcasses averaging around 45 kg. Thus, pigs reared for pork are called porkers, and those reared for bacon are baconers. The lard-type breeds have a greater tendency to put on fat than those of the bacon type. Besides the fat from which lard is made, considerable meat for bacon and other purposes is obtained from the lard-type animals when they are slaughtered. On the other hand, portions of the carcasses of the bacon-type pigs are useful for meat purposes and other portions are used for lard which is also in high demand. Breeding pigs of the so-called “medium” type is more desirable than either the small type or large type as the medium type gains more rapidly and economically. Moreover, compared with the large type, medium type produces a better quality of carcass and can be finished for market at a younger age.

It is necessary to mention eight major pig breeds differing growth rate, the number of



young produced, mature body size, and ability to graze. The Berkshire (black with white points) and the Yorkshire (also called Large White) originated in England. Found in most countries, the later is on bacon type and probably the most widely distributed in the world. Such breeds as the Chester White, Duroc (red), Hampshire (black with a white belt) originated in the U SA, While the Landrace, a large, long, white pig, was imported from Denmark. Nowadays most commercial pig production is based on crossbred animals, because crossbreeding results in hybrid vigour. The raising of market pigs by mating crossbred sows with a boar of a third breed is widely practiced.

For centuries pigs have been used for obtaining edible fat and meat. For example, in the USA until the mid 1920s pigs were bred for the production of large amounts of lard and now hogs provide about one quarter of the meat eaten in this country. However, in other countries such England, bacon-type pigs were mainly bred for producing lean meat. Modern swine are intermediate between these two types and are known as meat types pigs resembling the bacon-type has become greater importance.

However, among other useful products supplied by pig production it is necessary to mention leather (pigskin) for luggage and gloves, bristles for brushes, soap, glue, edible fat, and hormones such as insulin that can be extracted from pigs' glands.

In comparison with cattle and sheep, rearing pig production is more intensive for a number of reasons. Well-adapted for the production of meat because they grow and mature rapidly, pigs have a short gestation period and produce large litters each time. Thus, pig breeders are interested in selecting a female with a high degree of prolificacy producing uniformly fast-growing piglets. The number in the litter is important because the tendency to produce large litters is transmitted, the boar as well as the sow has an influence on the prolificacy of his offspring. In selecting the gilt for breeding, a breeder should take into consideration the information about the sire and the dam as well as about the ancestors for two or more generations. Moreover, the data about the number of pigs farrowed in the previous litters and the number of pigs of each sex raised may be of great use. In choosing the boar for mating, most of the considerations mentioned for selecting gilt are important as well. In general, each of the resulting litters will consist of about seven-ten piglets, each with a birth weight of 1.1 kg (2.5 pounds). Due to proper breeding and mating programmes more prolific strains of swine have been developed, so litters of 12 piglets are considered normal rather than exceptional among some breeds of swine. The number of pigs at farrowing time is also influenced by the condition of the sow before breeding.

Domestic pigs are so widely raised in almost every part of the world due to their quite efficient converting feed to food under intensive conditions. In contrast to most domestic animals, pigs are omnivorous so they can utilise a wide range of foods such as cereal grains and legumes into meat. Corn is usually the basic feed for pigs, although wheat, sorghum, oats, and barley are often included in their diet. If soybean meal or other oil meals are available in abundance and



at reasonable price, they can be used for feeding pigs due to high protein content. Antibiotics to control disease have become a standard ingredient in most pig rations. The use of antibiotics after World War II, especially in regions of less favourable sanitation, increased gain by as much as 20 percent. In general, improvements in pig management, feed rations and disease control have all contributed to faster gains and lower feed requirements per pound of weight gain.

The systems of pig housing range from the traditional piggery to rearing in yards provided with a shelter. It is relatively easy to raise pigs in confinement if the pigsty is provided with the due means of environmental control. Well – equipped modern pigsties make it possible to maintain proper sanitary conditions and keep pigs confined from birth to market. The pigsty is usually built with removable partitions so that farrowing pens can be provided when desired. As the sow produces several small piglets that are small and easily injured during the first few days of their lives, individual farrowing pen is needed for each pregnant sow when she has farrowed and for at least 3 to 5 days following farrowing. It is necessary to provide the sow with the due bedding that neither irritate the sow's udder nor restrict the pigs' movement.

It has been found that pigs can be slaughtered with a minimum of equipment because of their size and there are many ways in which their carcasses can be processed into food and fat.

It is essential for pig breeders to protect their animals from contracting various infectious and parasitic diseases as pigs are very susceptible to them. The most common infectious disease which is often fatal to young pigs results from catching transmissible gastroenteritis. As to cholera, formerly veterinarians tried to control it by using vaccination, but now they insist on slaughtering the infected animals.

Leptospirosis is a common disease of pigs as well as humans and most warm-blooded animals, however, veterinarians have succeeded in controlling it by vaccination as well. The controlling of necrotic enteritis and other infections of the intestinal tract largely depends on treating animals with antibiotics.

In order to control parasitic diseases pig breeders mainly rely on introducing effective sanitation programmes on their farms. Moreover, farmers specializing in raising pigs on the pasture have fewer problems with parasitic diseases than those raising pigs in confinement. Nowadays scientists' efforts are concentrated on further developing effective vermifuges, that is, drugs which kill or expel parasitic worms from pigs. The high level of pig production in such countries as the USA, the Scandinavian countries and Western Europe is mainly due to applying effective preventive measures to control infectious and parasitic diseases in pig herds.