French palmiped breeder moves with the times

When it comes to duck and goose breeding, Sepalm claim to be the French specialists with over 25 years experience in the field. To find out why this should be, International Hatchery Practice recently visited their facilities in the southwest of France.

Sepalm was created in 1978 to select palmipeds (web footed birds) for the French foie gras producers.

Today, it is producing ducks and geese for a variety of markets and the main business of Sepalm is the selection and production of Pekin and Muscovy ducks.

The Sepalm breeding farm.

Pekin developments

The Pekin females, which were once intended only for mule duck production are now selected in their own right.

However, the future also lies in variety and to this end other lines have been sought for crossing purposes and to increase growth possibilities.

A good example of this is the cooperation agreement between Sepalm and Rugeriet Broholm in Denmark, the only owner of genuine Legarth strains.

In the duck breeding programme emphasis has been placed on breeding performance and this has reaped its benefits in duckling production per breeder female.

Typically, over 220 hatching eggs per female are produced from a 40 week lay.

However, genetic progress has been balanced and this performance at the breeder level has not been achieved by sacrificing performance in the final meat generation. For example, Sepalm's heavy strain is quite capable of a 3.25kg body weight at 42 days.

Focusing on mules

Mule duck production is still at the core of Sepalm's activities and their breeders were the first in the world to have been selected for their capacity to produce mule ducks for force feeding.

Here, improvement in egg production, fertility and hatchability have all contributed to maximise the number of mule ducklings produced per female.

Research into breeding has involved various bodies in France, including the Government research centre at INRA, ENSAT (The National Agriculture School at Toulouse) and AGPM (the Corn Producers Association).

In addition to the ducks Sepalm have also focused on goose breeding.

Originally, this was primarily for the French force feeding sector for foie gras production, but today different female lines are available, depending on whether you want to produce eggs or growth with heavy liver potential.

When it comes to geese, Sepalm are

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Goose eggs awaiting setting in the hatchery and, right, the Petersime incubators.

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considered to be the French leader. Looking at the future, Sepalm see the meat (Pekin) duck sector as their growth sector and, to this end, they have developed their new SPL product.

In the final generation males, weights of 4.0kg at 56 days and 3.5kg at 49 days for the females are easily achievable and breast yield is 22.5%.

Sepalm actually operates from one site and has a close synergy with the French poultry breeder SASSO, especially when it comes to marketing.

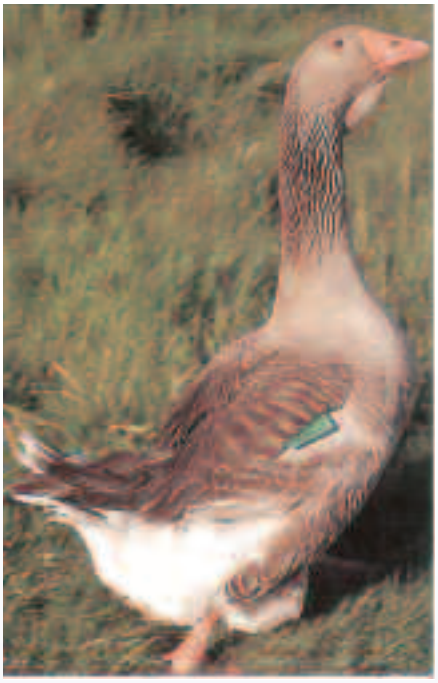
Dominating the French market

In the French foie gras market, Sepalm have over 45% of the mule duck market and over 90% of the goose market. Final generation products are reared by small French farmers, many of whom use their own corn to feed their mule ducks or geese.

At breeder level the female in lay eats approximately 100kg of corn and from this produces 70 male mule ducklings.

Table 1. Breeder production performance of the Maxi.

	Number of eggs	Number of goslings
1st cycle	30-35	22-25
2nd cycle	45-50	32-35
Total of six cycles	190-210	135-150



The Maxi.

Only the males are used for forced feeding.

On the Sepalm breeder farm the activities are centered on rearing, laying and selection and there are two hatcheries – one for ducks and one for geese.

The company complies with the SYSAAF sanitary regulations and has detailed operating procedures for all key aspects of farm and flock management, including the infrastructure, selection, selection criteria and quality.

In the mule duck market sector the total parent stock requirement for France is some 600,000 Pekin females a year. All customers use AI and so only one Muscovy male per 30 Pekin females is required.

However, male staying power is not good and typically each Pekin laying flock is serviced by three inputs of Muscovy males at 15 week intervals.

The breeding of the final generation product is interesting in that the crossing has an adverse effect on fertility and so three times the spermatozoan concentration is required. This is approximately 150 million spermatozoa per insemination.

The genetics of Sepalm's new Pekin product, the SPL, comes from two distinct gene pools and this gives it some 'hybrid' vigour. Selection has focused on carcase weight for age, breast (filet) yield, leg yield, and leg strength.

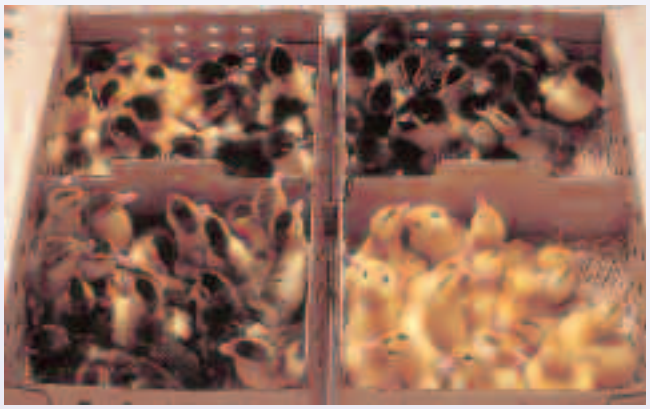
The goose breeding programme is based on a pedigree pool, the progeny of which are put through two 18-20 week production cycles.

PERFORMANCE OF THE SEPALM F30+

Body weight at 27 weeks (kg)	2.9
Body weight at 68 weeks (kg)	3.3
Production at peak (%)	92
Total number of eggs	225
Total number of day old goslings	218
Number of grade A mule male goslings	70
Mortality in lay (%)	3

In the first cycle, emphasis is placed on laying traits with special emphasis on capacity for early lay, whereas in the second cycle more selection pressure is placed on the commercial traits of the final generation such as growth rate, body weight at start of force feeding and liver and filet (magret).

The different types of duckling.



The Sepalm F30+.

Lay rate in geese is low with, at best, one egg every two days which means that breeder flocks peak at about 50%.

Typically, a flock takes some six weeks to reach peak, stays at peak for about six weeks and then declines in production for six weeks. At the end of the cycle natural moulting takes place.

In commercial goose breeders at parent stock some six cycles of lay occur in the goose's four year life span. In the four years a female goose is capable of producing some 170 or so goslings.

The goose breeding programme centres around four lines and the overall goal is to increase body weight without sacrificing egg numbers. ■