

Synchronising Ewes for Early Lamb Production

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Sheep are seasonal breeders – in ewes oestrus begins as day light hours start to decrease in the autumn. From a marketing point of view it is important that lamb of a consistent quality is available all year round. To achieve this, a proportion of the national flock needs to lamb in the December /January period to provide finished lambs from Mid March onwards.

While there are some breeds that will naturally commence oestrous cycles in July / early August (e.g. Ile de France & Dorset Horn) for the vast majority of the breed types in the Irish National Flock (including Suffolk crosses and other breeds) oestrus can be induced by using progestagen impregnated sponges. The use of sponges allows for oestrus to be synchronised and thereby allows the use of PMSG to be used to increase ovulation rates and ultimately the litter size of ewes successfully mated.

Early lamb production systems rely heavily on concentrate feed/brassica crops as the lambing and rearing phases of the production cycle take place outside of the normal grass growing season. To justify the costs it is essential that the lambs produced from this system meet the target outlined below.



Ewes should be at least 6 weeks weaned when sponged

Dose of PMSG

The recommended dose of PMSG is 500 to 700 iu per ewe.

Targets

- 70% of ewes sponged conceive & lamb down
- Litter size of 1.7 lambs per ewe lambled
- 90% of lambs sold by 16weeks of age

The programme for synchronisation and mating is outlined in Table 1.

Table 1. Synchronisation and mating regimens for out of season mating of ewes

Procedure	Timeframe
Insert Sponges	Day 0 AM
Remove Sponges and Inject PMSG (500- 750iu)	Day 12 AM
Mating hogget ewes	Day 13 PM
Mating mature ewes	Day 14 AM
Remove Rams	Day 16
Introduce Rams for Repeat Mating	Day 28
Remove Rams	Day 34
Scan Ewes & return non pregnant ewes to ram	Day 80



It is recommended that the ewe to ram ratio should not exceed 8:1

Important Points

- Use sound ewes (udder, feet, mouths and no history of prolapse)
- Ewes should be at least 6 weeks weaned when sponged

- Ewes targeted for sponging should be in BCS 3.5
- Only sponge ewes that have been dried off for at least two weeks
- Rams must be fit, free from lameness and have not been subjected to elevated body temperature for the least 8 weeks pre mating.
- Use a number of rams together (ideally 3+)
- Hogget ewes - introduce rams 36hours post sponge removal
- Mature ewes - introduce rams 48hours post sponge removal
- Order sponges & PMSG in advance – store PMSG in fridge until required.
- Insert sponges gently – special care should be taken with first time breeders – use lubricant
- Clean and disinfect sponge applicator between ewes
- Inject PMSG into the muscle at the time of sponge removal
- Use a mature ram to ewe ratio of max 1:8

Availability of Drugs

Both the progestagen sponge and PMSG are prescription only medicines (POM).