

What Synchronization Program is Right for You?

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Ovsynch[®], Cosynch, Presynch, Resynch - It is almost impossible to keep them all straight. It seems like every magazine that comes in the mail has an article boasting the next great synchronization protocol that promises "out of this world" results if you implement it in your herd. To make matters worse, it seems like everyone is a sudden reproductive guru adding their own variations to previously existing synchronization protocols. So how do you decide which protocol will work best on your farm? And once you decide, how do you implement your new synchronization program? In this article, I will discuss the importance of



choosing a synchronization program that will fit the needs of your farm, describe how to successfully implement the program, and explain why compliance to the program is a must.

Choosing a Program

Before choosing a synchronization program there are a number of things to consider. First, a synchronization program is not a substitute for good management. Success of a synchronization program will depend on the nutrition and herd health program that has been specifically designed for females in the herd. Before considering a synchronization program for your herd, ask yourself these seven questions:

- 1) Are females in the herd exhibiting regular estrous cycles?
- 2) Are the females healthy, free from disease and on a good nutrition program?
- 3) Do you and your staff have a willingness to learn the program and the products used for synchronization?

- 4) Do you have the facilities to handle cattle effectively?
- 5) Can you provide the extra labor needs for implementing a synchronization program?
- 6) Are females individually identified for accurate record keeping?
- 7) If you choose a program that requires heat detection, are you willing and able to provide thorough detection of estrus?

If you answered "no" to any of these questions you may want to reconsider implementing a synchronization program at this time. Remember, an estrus synchronization program alone is not a cure-all for poor reproductive performance. If you are still considering the implementation of a synchronization program, look at your herd and see what changes could be made to help make the program successful. It takes an investment of extra time and money, but if you are willing to invest both the payoff can be more pregnant cows in a shorter time period.

Implementing a Program

The first step in implementing a synchronization program is to choose what program meets your herd goals. Important things to consider when choosing a synchronization program are the number of times you are willing to handle the females throughout the program and the amount of money you are willing to spend on synchronization products. If the synchronization program you choose does not fit your herd goals and needs, it will not be successful.

Now let's take a look at some of the common synchronization protocols:

Ovsynch

Ovsynch was the first widely used and accepted timed artificial insemination (A.I.) synchronization protocol. During the Ovsynch program, the cow is first given a shot of GnRH. The shot of GnRH is meant to ovulate the follicle of the current follicular wave. This will assure the follicle being ovulated for breeding is a fresh new follicle. Seven days later a shot of prostaglandin is given. The

prostaglandin will lyse the corpus luteum that resulted from the first ovulation. Forty-eight hours later, a shot of GnRH is given. The GnRH will assure ovulation of the second follicle. Timed A.I. should occur 12-18 hours after this second injection of GnRH.

Inject GnRH ^M							
	^T	^W	Th	^F	^S	^S	
Inject PGF₂^α ^M							
	^T	Inject GnRH ^W	Timed AI Th	^F	^S	^S	

Cosynch

Cosynch is very similar to the Ovsynch protocol. The only difference is that the second injection of GnRH and timed A.I. occur at the same time. Cosynch has been embraced as a less labor intensive synchronization program. The protocol reduces the production loss per cow as the cow is handled one less time; however, research has shown that you should expect a slight reduction in conception rates when compared to traditional OvSynch.

Inject GnRH ^M							
	^T	^W	Th	^F	^S	^S	
Inject PGF₂^α ^M							
	^T	Inject GnRH & Timed AI ^W	Th	^F	^S	^S	

Presynch

The Presynch program starts with two shots of prostaglandin 14 days apart followed by the traditional Ovsynch program. Conception rates are generally higher with Presynch than with traditional Ovsynch. This is because the first two shots of prostaglandin have a therapeutic effect of cleaning and conditioning the uterus, while effectively presynchronizing the cow. This program is often used to ensure all females are receiving their first service shortly after the voluntary waiting period has passed.

Inject PGF_{2α} ^M	T	W	Th	F	S	S
	T	W	Th	F	S	S
Inject PGF_{2α} ^M	T	W	Th	F	S	S
	T	W	Th	F	S	S
Inject GnRH ^M	T	W	Th	F	S	S
Inject PGF_{2α} ^M	T	Inject GnRH ^W	Timed AI Th	F	S	S

Cosynch and EAZI-BREED™ CIDR®

The Cosynch and CIDR method combines the Cosynch protocol with a CIDR. This program is useful to synchronize females that need to be "jumpstarted" during an anestrus period.

After choosing the synchronization protocol you will use, it is important to set a standard operating procedure for the protocol. Consider who will be giving the injections, the time of day shots will be given, what days of the week the injections are administered and who is responsible for deciding which cows will be enrolled into the program.

Inject GnRH ^M	T	W	Th	F	S	S
Insert CIDR						
Remove CIDR ^M	T	W	Timed AI & Inject GnRH Th	F	S	S
Inject PGF_{2α} ^M						

Compliance to a Program

On page 18 of the August 2006 issue of Horizons, Roy Wilson (Genex Technology Development Manager) discussed the importance of compliance to synchronization programs used on farms. Wilson said, "Think about Ovsynch: Science has proven if a cow receives a GnRH shot on day one, prostaglandin on day seven and GnRH on day nine the majority of cows will ovulate. Keep in mind, science did not prove if a cow receives a GnRH shot on day one, PGF₂α on day eight and GnRH on day nine that a cow will ovulate."

Most people would say achieving 95 percent compliance is a good thing. In fact, if your child brought home a 95 percent on a test most of us would be thrilled - after all, that is an "A." However, if you told me the synchronization program on your farm was being carried out with 95 percent accuracy, I consider this a big problem. If your farm was using an Ovsynch or Cosynch protocol which involves three shots at 95 percent accuracy you would actually synchronize only 86 percent ($.95 \times .95 \times .95 = 86$ percent) of the enrolled females correctly. If you were using a Presynch protocol which includes five shots, at 95 percent accuracy you would actually synchronize only 77 percent ($.95 \times .95 \times .95 \times .95 \times .95 = 77$ percent) of the enrolled females correctly.

Noncompliance to the program is probably the number one reason why synchronization programs fail. The investment of extra time and money in a synchronization program is significant, so make sure everyone involved understands the importance of the right cow, getting the right shot, on the right day.

A synchronization program can be just the thing you are looking for to help boost your herd's reproductive performance. No matter which program you choose your local Genex representative has the knowledge and the tools to help you make it successful. Good luck and happy synching!