

# Understanding the Genex Fertility Advantage

*By Angie Kringle  
Communications Specialist, CRI*

As a dairy producer, you are faced daily with decisions impacting the future of your herd. Choosing high quality genetics for the next generation is a decision that cannot be overlooked. To improve fertility and increase conception rates, consider the advantages of Estimated Relative Conception Rate (ERCR), GenCheck™ and SynchSmart™.

These three indicators give you an edge in determining sires with high semen fertility and those that perform best as part of a synchronization program. To find their place in your reproductive program it is important to know the purpose of each conception indicator.

## Focus on Fertility

There are two different ways to recognize highly fertile sires in the Genex lineup. ERCR, calculated by the United States Department of Agriculture (USDA), is released with each sire summary. GenCheck, calculated in-house through analysis of over 1.9 million inseminations, is released when a sire reaches 300 services. As more inseminations occur and a sire summary period is reached, a sire's GenCheck ranking is replaced by the USDA-calculated ERCR.

**Definition:** Both ERCR and GenCheck measure a sire's ability to make pregnancies. They illustrate the difference in conception rate of one sire compared to other A.I. sires used in the same herd.

**Rankings:** ERCR rankings in the Genex lineup range from -2 to +4 with each positive point signifying an increase of one percent to the "average" service sire's conception rate.

There are five GenCheck values which are relative to each other. You can find these rankings used in the Investment Guide along with an explanation of each.

**Why use ERCR and GenCheck?** The benefit of high semen fertility is recognized at that breeding (i.e. has a very low heritability). Especially during the summer when heat stress could decrease conception rates, high semen fertility gives you an extra advantage in creating a pregnancy.

## Synching Smart

It has been observed that semen from some sires performs differently when used on synchronized females (females given hormonal treatments to induce ovulation). To confirm this observation, Genex turned to the annual data on 1.9 million inseminations.

Released in February 2007, SynchSmart ranks Genex sires for their conception ability when used as part of a synchronization protocol and proves that some sires do create more conceptions in synchronized females.

**Definition:** SynchSmart rankings measure the sire's ability to make a pregnancy in a synchronized female. This ranking is not related to ERCR or GenCheck and is not an indicator of semen quality.

**Rankings:** SynchSmart rankings are given on a numerical basis with sires in the current lineup ranking from -1.5 to +3.5. Like ERCR rankings, each positive SynchSmart point indicates an expected one percent increase in conception rate compared to an "average" sire.

**Why use SynchSmart?** Use sires with high SynchSmart rankings only when the cows have been enrolled in a synchronization program. After investing the time and money into a detailed

synchronization program, choosing sires based on SynchSmart rankings is the next logical step towards a pregnancy.

To increase overall profitability, primary selection emphasis for A.I. services sires should focus on bulls with high Lifetime Net Merit (LNM\$). ERCR, GenCheck and SynchSmart should be used as secondary selection tools when choosing sires to incorporate into a breeding program. Combine high LNM\$ and high fertility, or high LNM\$ and high SynchSmart rankings, to get profitable pregnancies on which to build your herd.