

Many are Choosing to Implement a Crossbreeding System

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Many dairy producers have decided to begin using a crossbreeding system for their dairy operations. Some would say it is about time – the pig, beef cattle, and sheep industries have embraced the “gift” of hybrid vigor for commercial production for over 50 years! Hybrid vigor is greatest for fertility, health, and survival traits – just the traits that most dairy producers are experiencing frustration and are seeking improvement today.

Some A.I. organizations are using scare tactics to discourage dairy producers from moving to a crossbreeding system. Why would they do this? The answer is because they have mostly Holstein semen for sale. Is there anything to fear in switching to a crossbreeding system? The answer is, “Absolutely not.” Will crossbreds have noticeably less production than pure Holsteins? Not according to the research that we have conducted with seven large dairies in central California. In fact, the results from those dairies were exactly what was expected – slight, if any, loss in production, but dramatic improvements in reducing calving difficulty, lowering stillbirths rates, significantly improving cow fertility, and enhancing survival.

Some A.I. marketers argue that you can make as much improvement for these traits within breed as from crossbreeding.

Don't believe this marketing propaganda! Hybrid vigor is huge for pigs and beef cattle, and it is huge for dairy cows, too. Can the pure breeds make genetic improvement in fertility, health, and survival? Absolutely – but not as quickly as you can with crossbreeding. Besides, hybrid vigor is always expressed ON TOP of the average of the breeds that are crossed. Of course, we need registered breeders to stick with their purebreds.

Which breeds should you use? Most dairy producers have grade Holsteins. Therefore, the first breed is probably an automatic selection. However, three breeds are needed for a crossbreeding system. Which ones? That depends on your preferences and the environment of your dairy operation. For most dairy producers, the Scandinavian Red breeds (Swedish, Norwegian, and Finnish) will likely rank high among candidate breeds. Why? Because their average production level is close to Holstein (hybrid vigor brings the production level up to that of a pure Holstein), and the Scandinavian Red breeds have selected heavily for fertility and health, along with production, for many years. Other breeds commonly considered for crossbreeding systems are Brown Swiss, Jersey, Montbeliarde, and Normande.

Whichever breeds you choose, be sure to select THREE! Then, use those three breeds in a simple 3-breed rotation. An example – a Holstein gets bred to Swedish Red. That first-cross female is bred to Montbeliarde, and the next generation gets bred back to Holstein. This is a very simple system – nothing confusing about it – and it certainly is much simpler than calculating inbreeding coefficients for potential matings within breed to avoid inbreeding, which is crucial these days. Beware – DO NOT breed a first-cross heifer back to a Holstein sire – select an A.I. sire from a third breed to maintain a high level of hybrid vigor.

Where can you purchase semen from the European breeds? Select Sires distributes Swedish Red and Montbeliarde. Semex distributes Norwegian Red. Genex/CRI distributes Finnish Red. Marketing agreements among countries and organizations are still being negotiated. For example, in the United Kingdom, ABS distributes Swedish Red and Alta distributes Montbeliarde. In Australia Genetics Australia distribute Swedish and Danish Red and Montbeliarde. Over time, these marketing partnerships will become more formalized and global in scope. The time for crossbreeding has arrived for commercial milk production.

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