2018 National Meat Animal Evaluation Contest

Subject- Targeted Genome Editing in Livestock

Scenario

Over the last 100 years, the animal breeding industry has seen significant advancements in reproductive technologies (AI, ET, IVF and cloning) and genetic selection (the advent of EPDs, gene level marker assisted selection, and high and low density marker panels). Collectively, these advancements have continuously accelerated our rates of genetic progress across all livestock species.

However, new discoveries in the field of genetic engineering, like CRISPR/Cas 9, are positioned to be the biggest game changer yet. Read the enclosed abstract published recently in the Journal of Transgenic Research to respond to the following challenges.

1. Should livestock producers/breeders embrace targeted genome editing?
2. Should packers/processors?
3. Should retailers/consumers?