

The pilot study on genotype screening of brachyspina syndrome on dairy cattle herds in Taiwan ⁽¹⁾

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Brachyspina syndrome (BS) is inherited autosomal recessively in Holstein cattle, which would result in miscarriage or stillbirth for dairy cows and thus cause unpredictable economic losses to dairy farmers. The purpose of this study is to reveal bovine brachyspina syndrome carriers frequency in dairy cattle population. A total of 441 samples were genotyped, which were 409 blood samples from four dairy farms and 32 frozen bovine semen samples. Thirty-five blood samples and one frozen semen were identified as BS carriers and the others were normal. The frequencies of carriers for blood samples and frozen semen were 8.56 and 3.13%, respectively. Because of high frequency in BS carrier genotype, it implies that the dairy farmers have potential losses due to BS. Therefore, the BS genotypes of bovine frozen semen needs to be under surveillance and ensure no BS carrier calves into dairy cattle population in Taiwan. Thus, it is possible to eliminate gradually the genetic deficiency in the future.

Key words: Brachyspina syndrome, Dairy cattle, Genotyping, Frozen semen.

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