FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

| COUNTRY | JAPAN |
|---|---|
| Breed(s) | Holstein-Friesian |
| Traits evaluated and units of measurement | Milk (kg), fat and SNF % |
| Number of lactations | 1 |
| Genetic parameters applied | Milk: Milk 0.30, fat % −0.24, SNF % −0.08<br>fat %: Milk −0.34, fat % 0.60, SNF % 0.67<br>SNF %: Milk −0.18, fat % 0.64, SNF % 0.50<br>Figures underlined are heritabilities. Upper-right are phenotypic correlations. Lower-left are genetic correlations. |
| Inclusion and extension of records | Records <240 days not used. All records extended to 305 days. If milk yield falls below 2.5 intra-station standard deviation units from the mean, records are excluded. |
| Sire categories evaluated | Government owned bulls for AI use |
| Effects considered by preadjustments | None, because age of all cows (daughters) and date of their calving are controlled so as to fall within about three months |
| by model of evaluation | Station, sire |
| Base for age adjustment | M.E. |
| Use of genetic groups/ relationships/pedigree | None |
| Method of evaluation used | Least squares estimates |
| Expression of genetic merit | BV (kg, %) |
| Genetic base, kind/definition | Rolling. Average BV of bulls progeny-tested each year |
| Minimum requirements for official publication of sire proofs | Rpt. $\geq$0.55 |
| Use of selection index or total merit index | The three production traits are included in a selection index |
| Name and address or organization responsible for sire evaluations and publishing of results | Livestock Improvement Association of Japan, Inc. 4-9-2, Ginza, Chuoku, Tokyo 104 Japan |

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|---|---|
| Key references on methodology applied | T.Abe and K.Yokouchi. Bul. Nat. Inst. Anim. Ind., No. 34, 1978. (Japanese). T.Abe and S.Matsumoto. 1984. Progeny testing of dairy bulls in Japan. IDF/EAAP Symp. on progeny testing methods in dairy cattle. Prague, Sept. 14-16. IDF Doc. 183, 94-102. |

App.1

Country: Japan

Number of tested AI bulls, means and standard deviations of proofs by year

| Year of birth | No. of bulls | Breeding values | | | | | |
|---|---|---|---|---|---|---|---|
| | | Milk kg | | Fat % | | SNF % | |
| | | $\bar{x}$ | S.D. | $\bar{x}$ | S.D. | $\bar{x}$ | S.D. |
| **Breed: Holstein-Friesian** | | | | | | | |
| 1974 | 8 | -9.4 | 341.0 | 0.00 | 0.07 | 0.00 | 0.08 |
| 75 | 8 | 15.1 | 262.6 | 0.01 | 0.07 | 0.01 | 0.11 |
| 76 | 17 | 7.8 | 268.6 | 0.00 | 0.16 | 0.03 | 0.15 |
| 77 | 57 | 6.6 | 382.0 | 0.00 | 0.19 | 0.00 | 0.20 |
| 78 | 46 | 7.7 | 338.1 | 0.00 | 0.23 | 0.00 | 0.20 |
| 79 | 49 | 1.1 | 350.1 | 0.00 | 0.21 | 0.00 | 0.21 |
| 80 | 46 | 4.9 | 329.2 | 0.00 | 0.28 | 0.00 | 0.21 |
| 81 | 48 | -2.9 | 400.3 | 0.00 | 0.22 | 0.00 | 0.21 |
| 82 | 53 | -2.1 | 491.6 | 0.02 | 0.26 | -0.02 | 0.20 |
| 83 | 51 | -1.6 | 392.2 | 0.00 | 0.23 | 0.00 | 0.22 |
| 84 | 57 | 2.1 | 406.0 | 0.00 | 0.24 | 0.00 | 0.16 |
| 85 | 58 | 4.9 | 412.8 | 0.00 | 0.22 | 0.00 | 0.22 |
| 86 | 53 | -0.4 | 609.7 | 0.00 | 0.20 | 0.00 | 0.22 |
| 87 | 53 | 0.0 | 726.3 | 0.00 | 0.20 | 0.00 | 0.21 |

Country: Japan

App.2

Average phenotypic levels of (adjusted) production records included in the sire evaluation procedures

| Year of production | Traits | | |
|---|---|---|---|
| | Milk kg | Fat % | SNF % |
| **Breed: Holstein-Friesian** | | | |
| 1974 | 5008 | 3.70 | 8.51 |
| 75 | 5689 | 3.60 | 8.48 |
| 76 | 6128 | 3.42 | 8.40 |
| 77 | 5963 | 3.47 | 8.48 |
| 78 | 6079 | 3.50 | 8.52 |
| 79 | 6262 | 3.43 | 8.49 |
| 80 | 6309 | 3.56 | 8.66 |
| 81 | 6411 | 3.50 | 8.63 |
| 82 | 6522 | 3.50 | 8.62 |
| 83 | 6671 | 3.53 | 8.54 |
| 84 | 6803 | 3.53 | 8.61 |
| 85 | 7091 | 3.53 | 8.59 |
| 86 | 7267 | 3.51 | 8.68 |
| 87 | 7416 | 3.49 | 8.72 |