FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

| COUNTRY | ISRAEL |
| :---: | :---: |
| Breed(s) | Israeli Holstein |
| Traits evaluated and unit of measurement | Milk, fat and FCM (kg), fat \% |
| Number of lactations | 1-3, annual yields |
| Genetic parameters applied | $h^{2}=0.16$ for yields Repeatability $=0.5$ |
| Inciusion and extension of records | Records <90 days not included <br> Records 91-274 days extended <br> Records $>275$ days included without extension Records in progress utilized |
| Sire categories evaluated | All sires |
| Effects considered <br> by preadjustments <br> by model of evaluation | Age and calving month, days open Herd-year-season, sire, group of sires, cow |
| Base for age adjustment | 1st lact: 24 months 2nd lact: 36 months 3rd lact: 48 months |
| Use of genetic groups/ relationships/pedigree | Bulls by year (bi-annual birth groups) |
| Method of evaluation used | MCC, single trait (Change to BLUP indicated) |
| Expression of genetic merit | PD ( kg ) |
| Genetic base, kind/definition | Fixed, at lactations initiated in 1974 (cows) |
| Minimum requirements for official publication of sire proofs | Rpt. $\geq 0.50$ |
| Use of selection index or total merit index | Index milk + fat of first three lactations |
| Name and address of organization responsible for sire evaluations and publishing of results | "Evaluation programs:" <br> Animal Genetics and Breeding Unit Volcani Research Center, Bet Dagan "Processing and publishing:" <br> Israeli Cattle Breeders' Assoc. Ltd. 25 Arlozorov St., <br> Tel Aviv 62488, Israel |
| Key references on methodology applied | J.I. Weller, H.D. Norman and G.R. Wiggans, 1984 Sire evaluations with parities as correlated traits and comparison with single-trait evaluations. J. Dairy Sci. 67:2020-2020. |

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

| Year of birth of bulls | No. of bulls | Predicted differences |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Milk kg |  | Fat kg |  |
|  |  | $\bar{x}$ | S.D. | $\bar{x}$ | S.D. |
| Breed: Israeli Holstein |  |  |  |  |  |
| 1973 | 28 | 43 | 313 | -1.11 | 8.31 |
| 74 | 24 | -61 | 207 | -4.27 | 4.92 |
| 75 | 49 | 63 | 231 | -1.74 | 6.40 |
| 76 | 39 | 205 | 262 | 0.51 | 7.15 |
| 77 | 38 | 267 | 309 | 2.87 | 8.51 |
| 78 | 40 | 266 | 293 | 2.46 | 7.74 |
| 79 | 43 | 258 | 253 | 3.11 | 7.23 |
| 80 | 29 | 292 | 182 | 3.33 | 4.35 |

## Country: Israel

App. 2
Average phenotypic levels of (adjusted) production records included in the sire evaluation procedures

| Year of <br> calving | Traits |  |
| :--- | :--- | :--- |
|  | Milk kg |  |
|  |  |  |
| 1976 | 7435 | 229.9 |
| 77 | 7487 | 232.7 |
| 78 | 7716 | 24.4 |
| 79 | 7781 | 244.4 |
| 80 | 7993 | 256.9 |
| 81 | 8222 | 261.8 |
| 82 | 8421 | 269.0 |
| 83 | 8680 | 276.1 |

