



STANDARD OPERATING PROCEDURES FOR DAIRY GOAT PRODUCTION TESTING

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STANDARD OPERATING PROCEDURES

1.0 SCOPE & APPLICATION

- 1.1** This Standard Operating Procedure (SOP) is applicable to the systematic collection of data documenting milk yield including the measuring milk fat and protein for participants in DHI. The application of these procedures is to provide the framework for a uniform, accurate record system to be used for (1) making farm management decisions; (2) educational programs and research, including the genetic evaluation of does and sires; (3) breed association(s); and (4) the promotion and sale of animals.

2.0 SUMMARY OF PROGRAM

- 2.1** Sampling should be done in accordance with the National DHIA Uniform Operating Procedures (UOP, 2014). All UOP procedures, unless specific to dairy cows only, are to be followed. For purposes of compliance, the use of the terms “cows and heifers” is synonymous with “goats and kids”.
- 2.2** Procedures outlined in this document are specific to dairy goat production testing only. These basic and minimum standards are to be uniformly followed. They serve to ensure that records will provide the accuracy, uniformity, and integrity essential to dairy goat production records.

3.0 AUTHORITY

- 3.1** A Data Sharing Agreement exists between the ADGA and the Council on Dairy Cattle Breeding (CDCB). This includes the supervision of the collection of dairy goat phenotypic data based upon the Memorandum of Understanding that exists between the ADGA and the Agricultural Research Service of the United States Department of Agriculture (USDA) to ensure the flow of DHIA records for industry purposes including genetic evaluation programs.

4.0 RESPONSIBILITY

- 4.1** DHIA dairy goat test supervisors and herd owners as well as persons in their employ are individually and collectively responsible for adherence to these Procedures.
- 4.2** To participate in this dairy record keeping program, herdowners must agree to conform to these procedures, individual registry requirements, the NDHIA Uniform Operating Procedures and the associated Code of Ethics (UOP, 2014).

5.0 DEFINITIONS

- 5.1 Dairy Goat** - any goat from which milk production is intended for use or sale, or which is kept for raising replacement dairy kids and is an integral part of the dairy herd.
- 5.2 Test Supervisor (TS)** – Any person authorized to collect milk weights and samples for inclusion in the Goat Genetic Evaluation Program (interchangeable with ‘tester’, ‘field sampler/technician’ or ‘supervisor’).
- 5.3 Group Testing** – Must meet registry requirements. Each member of the test group is trained to perform supervisor responsibilities when weighing and sampling milk in the herds of other group members. All group testing is conducted under the jurisdiction and supervision of the DHIA.

**6.0 PERSONNEL QUALIFICATIONS**

- 6.1 All Test Supervisors are required to be approved by the DHIA of record prior to engaging in any field collection activities.
- 6.2 Training should be done in accordance with the CDCB, QCS Field Service requirements with the following being specific to dairy goat testing.

7.0 MINIMUM PERSONNEL TRAINING REQUIREMENTS

- 7.1 The minimum requirements for new test supervisors (TS) to test non-commercial herds (as determined by the herd's DHIA) without immediate supervision include demonstrated knowledge of (1) barn and parlor techniques, (2) data entry, (3) the *Code of Ethics* and *Uniform Data Collection Procedures*, and (4) the *Standard Operating Procedures for Dairy Goat Testing*. Commercial herds must have testers meeting the criteria of the CDCB auditing guidelines.
- 7.2 Documentation of the initial training must include (1) the name and date of training of the new TS, (2) the name and credentials of the trainer, and (3) a list of the topics covered during the training.
- 7.3 Continuing Education (CE) or refresher sessions should be provided in accordance with the CDCB Auditing guidelines. In addition, newsletters, videos, attendance at an ADGA annual meeting training session can serve as meeting CE requirements. Documentation must include (1) the name of each TS, (2) the name and credentials of the trainer, and (3) a list of the topics covered during the training.
- 7.4 TS other than those approved to test cowherds or commercial herds (as determined by the herd's DHIA) must obtain CE or attend an initial or a refresher session every 3 years. This is an exception to the CDCB auditing guidelines as it applies to those testers supervising herds using 'pail and scale' techniques. This exception is allowed as this type of test plan is subject to little change over time. Documentation of CE/Refresher must include (1) the name of each TS, (2) the name and credentials of the evaluator, (3) a list of the topics covered during the evaluation, and (4) a performance assessment based upon the CE/Refresher information provided.

8.0 EQUIPMENT AND SUPPLIES

- 8.1 Equipment needed for collection of dairy goat milk samples includes:

- sample vials or whirl paks*
- approved meter*, or
- sampling device (dipper) and scale*
- sample preservative
- field data sheets or data entry program

*The appropriate sampling and measuring devices must be of proper composition. See Section 10 for SOP Meters and Scales

9.0 SAMPLE COLLECTION – PREPARATION

- 9.1 Determine the extent of the sampling effort, the sampling methods to be employed, and which equipment and supplies are needed.
- 9.2 Obtain necessary sampling and/or weighing equipment.
- 9.3 Coordinate with herdowner and partner agencies, if appropriate.

10.0 SAMPLE COLLECTION - METHOD OPTIONS

- 10.1 Meters - All portable weighing and sampling devices being used for the generation of certified data must be of a National DHIA approved type. Meters for goat milk sampling must be calibrated in conformance to manufacturer specifications.

GOAT METERS

Manufacturer	Device	ICAR Approved	DHIA Approved
Afimilk	Afifree, 155, 155i	Yes	Yes
DeLaval AB	MM25 SG	Yes	Yes
Tru-Test Limited - New Zealand	Goat Meter model 50000		Yes
Waikato - New Zealand	Goat Meter		Yes
Werkzeug-und MB AG	LactoCorder	Yes	Yes



- 10.2** Scales being used for the generation of milk weights to be included in the *Goat Genetic Evaluation Program* must meet the following weight tolerance ranges at each specified weight:

Pounds	Minimum	Maximum
1	0.9	1.1
2	1.9	2.1
5	4.8	5.2
10	9.7	10.3
20	19.4	20.6

- 10.3** All scales must be checked for calibration by a certified meter technician or an individual approved by the DHIA prior to being placed in active service. The field technician or the herdowner may own Scales. Approved individuals must calibrate scales using certified weights.
- 10.4** Scales should be identified with a unique identification number.
- 10.5** All scales must be submitted for an approved routine calibration check by a certified meter technician or an individual approved by the local DHIA on an annual basis.
- 10.6** All scales receiving repairs that may have affected accuracy must be checked for calibration by a certified meter technician or an individual approved by the local DHIA before returning to active service.
- 10.7** Each scale must be identified with a tag, sticker, engraving, or other marking indicating the last calibration year and meter center used.
- 10.8** Documentation of scales must include (1) the make and unique identification number of the scale, (2) the meter technician's or approved individual's name, (3) the meter center used, (4) the date of calibration check, and (5) the final calibration check readings.
- 10.9** Dip Sampling must be done in a manner that assures a representative sample from the entire milk volume collected.

11.0 SAMPLE HANDLING AND PRESERVATION

- 11.1** Use pre-preserved sample vials.
- 11.2** Samples should be kept at room temperature and out of direct sunlight.
- 11.3** Keep samples in control of the tester – **EXCEPTION** – for group tests, samples may also be in control of the group leader, or person designated to ship the samples/data to the laboratory.
- 11.4** Record all pertinent data on a field data sheet or data entry program.
- 11.5** Samples should be shipped so that they arrive at the lab no later than 6 days after the test is performed.

12.0 DATA COLLECTION AND RECORDS MANAGEMENT

- 12.1** When a breeding date is available, and a doe freshens less than 10 days prior to the expected kidding date, it will be considered a normal kidding and the record initiated will be used for buck and doe evaluations. Does freshening 10 days or more prior to the expected kidding date, whether in milk or dry, will be coded as abnormal and the record initiated will not be used for buck and doe evaluations.
- 12.2** If a doe aborts while in milk and has carried a kid less than 80 days, her current record will continue without interruption. If a breeding date is not available, and the doe aborts while in milk for less than 240 days, her current record shall continue without interruption. Except for specific situations stated above, the current record shall end and a new lactation will begin.
- 12.3** Verification tests may be a required condition of test type plan or registry recognition level. It is the herdowner's and/or test supervisor's responsibility to arrange for such tests dependent on registry or regional requirements. Verification testing should be done in accordance with registry policies.
- 12.4** All data and information must be documented on field data sheets or data entry program.
- 12.5** Minimum Suggested Record Retention

- Field Sheets/Files – 2 years
- Record Center sheets/Files – 2 years
- Verification Sheets/Files – 2 years

13.0 QUALITY CONTROL (QC) AND QUALITY ASSURANCE (QA)

All field QC requirements of the ADGA QA Project must be followed.



14.0 REFERENCES

Dairy Goat Registry Guidelines, latest version
Uniform Operating Procedures and Code of Ethics, June 2014
DHIA West, Dairy Goat QC Program
Council on Dairy Cattle Breeding, General Auditing Guidelines, June 2010
QCS Certification Services, Inc., Auditing Policies and Procedures, November 2013

Collaborative project of California DHIA (now DHIA West) & the American Dairy Goat Association - 2004