

HOW TO DNA TEST YOUR GOAT (at 29/12/17)

- Following an explanation of how to go about organising a DNA test for your goat/s to prove their Nigerian Dwarf or Pygmy genetics.
- You should test all parents that are contributing to your animals % PY or ND. EG: if you have a 50% PY resulting from one 100% PY parent over an Australian mini, then you only need to prove the goat is the progeny of the 100% PY parent to show that your animal is a 50% PY. If you have a 50% PY that is the result of two 50% parents, or say a 25%/75% parent mix, then you need to prove the parentage to both PY parents in order to prove that animal is carrying 50% genetics.
- DNA testing is now conducted by a new company – Neogen under the brand Geneseek, however the testing is still at the University of QLD.
- First step is to get some DNA kits. At this time, the kits are free, however in the future there will be a small charge for the kits, and they may look slightly different.
- You can request kits to be mailed out to you by calling Renee on 07 5460 1960 or emailing RMolloy@neogen.com. Don't forget to include your postal address.
- They will post the kits to you. Each kit consists of a card, a plastic sleeve and a sticker.



- Collecting samples – for these tests you need to send hair samples. They are pulled from the animal with follicles attached. Place the samples on the card as per the instructions (on the card) and secure with the sticker.

Collecting Samples

- Before using the sticker you should record the animals name or tag # on it exactly as per the application form.
- Here is some information about collecting samples:

Where do I collect the hair samples from?

From the switch of the tail pull 20-30 CLEAN tail hairs with roots attached (per test).

Does it matter if my sample isn't clean?

While we realise that it isn't easy, it is imperative that samples submitted for DNA analysis are clean and dry. If the sample is wet when it is collected, it must be dried before it is placed in the collection kit. Wet, damp or soiled samples will grow mould and which means we cannot use the sample.

Can I collect in wet weather?

Your collection schedule is of course up to you, but please do not pack wet samples into collection kits.

Can I send a sample from an animal that has died?

Yes, but it must be a tissue sample - usually an ear or part of the tail are the easiest to send. We are unable to extract DNA from the hair of an animal that has died.

Can I send empty semen straws?

No. We do not accept empty or used semen straws.

- For each batch of samples you are testing, you will need to complete an Application form. You can find this form in the files section of the MGBA members facebook page. It is an excel spreadsheet and consists of 3 tabs, use the tab titled Application Form.

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- Firstly fill out all your contact details at the top.
- For each animal you are testing fill out a new row. Enter the “Unique animal identifier” with the goats full name. This name should match the name that is on their MGBA registration – eg Zodiac Jane Doe. The sample card ID (ie the sticker) should be the same as the animal identifier
- Add sex and DOB. The next box “TEST 1” is where you select the kind of test you want. MiP is the test that profiles your animal from their hair sample. PV is the test that proves parentage – ie that the hair sample belongs to the offspring of the nominated dam and/or sire. So select or enter “MiP+PV”. This means you will be proving the parentage of your animal, PLUS making a DNA profile of your animal that can be used in the future to prove their offspring.

| Goat Genotyping Application Form | | | | | | | | | | | |
|--|---------------------------|---|-----|---|--------|--------|------------------|-------------------|-----------------|------------------|--|
| Name: | | GeneSeek Australasia | | | | | | | | | |
| Address: | | Herd Code/Prefix: | | PO Box 1388 | | | | | | | |
| Breed: | | Member ID: | | UQ Gatton Campus | | | | | | | |
| Date: | | ABN: | | Gatton QLD 4343 | | | | | | | |
| Ph: | | Mob: | | Phone: (07) 5460 1860 Fax: (07) 5460 1865 | | | | | | | |
| Email: | | gaa-lab@neogen.com | | | | | | | | | |
| Payment will be made via (please choose from dropdowns): | | For Terms and Conditions please visit our website: genomics.neogen.com/au/ | | | | | | | | | |
| <p>EMAIL AN ELECTRONIC COPY OF THIS FORM TO gaa-lab@neogen.com WHEN SUBMITTING YOUR SAMPLES FOR ANALYSIS. SEND A HARD COPY WITH YOUR SAMPLES. SAMPLES THAT ARE RECEIVED WITHOUT THE RELEVANT HARD COPY AND ELECTRONIC FILE WILL NOT BE PROCESSED. *Please refer to the RED instructions tab (below left) for further details and clarification*</p> <p>* This UNIQUE ANIMAL IDENTIFIER can be Registration Number, Animals Name and/or Ear Tag. NOTE Ear Tag alone is insufficient as the same number/code may be used by multiple clients</p> | | | | | | | | | | | |
| CASE NUMBER | UNIQUE ANIMAL IDENTIFIER* | SAMPLE CARD ID | SEX | D.O.B. | TEST 1 | TEST 2 | SIRE CASE NUMBER | SIRE REGO / IDENT | DAM CASE NUMBER | DAM REGO / IDENT | Test Request Service Description |
| 1 | | | | | MP+PV | | | | | | MIP Microsatellite Profile, NO parentage analysis MIP+PV Parentage Verification with Microsatellite Profile PV Parentage Verification only |

- Next you need to add in the name of the Sire or Dam (or both) that you are proving are the parents of your animal. Every animal that has been DNA tested has a unique UQ case number. It is represented as UQ#123 for example. You need to include the sire or dam name plus their UQ#.
- You can find the UQ# of the dam or sire of your animal on their MGBA certificate (see over). All UQ# are recorded in Premium Breed. If they not registered with MGBA, then you can contact the Uni to find out the UQ# for the sire/dam as long as they have been DNA tested, they will be on file. Also the ND or PY registrar can assist if you cannot find the case number for the parent.
- This is an example for the goat Zodiac Saffron ND37.5% of the application form, the results and her MGBA certificate (on next page). Note that it has his name and ear tag, however name is sufficient:

| CASE NUMBER | UNIQUE ANIMAL IDENTIFIER* | SAMPLE CARD ID | SEX | D.O.B. | TEST 1 | TEST 2 | SIRE CASE NUMBER | SIRE REGO / IDENT | CASE NUMBER | REGO IDENT |
|-------------|---------------------------|---------------------|-----|------------|--------|--------|------------------|-------------------|-------------|------------|
| 1 | 1612 Zodiac Saffron | 1612 Zodiac Saffron | F | 12/08/2016 | MIP+PV | | UQ#683 | Topaz Basil | | |

- This application is testing Zodiac Saffron against Topaz Basil to prove Basil is her sire. Basil has already been proven to be a 75% Nigerian and has a case number of UQ#683.

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- Once you have completed the application form, you print out a copy and include it in the same envelope as your samples, and post to the address on the application form. The will not complete the tests if the application form is not included with the samples. At the same time, email a copy of the application form to the lab (gaa-lab@neogen.com). They will then raise an invoice and email the invoice back to you for payment.
- The current price is \$35 + gst per test (one price for the MiP+PV). This may change in the future with the new company, however this is our current price.
- Once the tests are done and the payment has been received, you will receive your results – one pdf page for each animal.
- This is a copy of Saffron’s results. You can see that she has been proven to the be offspring of Topaz Basil, and now Zodiac Saffron has her own UQ unique indentifier case number (UQ#716). When she kids, we can use her profile and case number to prove parentage (and therefore %) for her offspring.
- When you receive your results, forward to the appropriate MGBA registrar so we can finalise your registration.

ANIMAL GENETICS LABORATORY
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Fax: 5460 1565
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ABN 63 942 912 684

THE UNIVERSITY OF QUEENSLAND AUSTRALIA

Date Of Issue: Monday, December 14, 2016

OWNER: D

ROBERTSON NSW 2577

ANIMAL DETAILS: UQ# 716

Name: ZODIAC SAFFRON Ear Tag: 1612
Breed: GOAT Sex: Female
Registration No.: NI378405 1612 Date of Birth: 12 August 2016

GENOTYPE RESULTS: Adjusted to the International Society of Animal Genetics standard

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|----------|-----|-----|----------|-----|-----|-----------|-----|-----|-----------|-----|-----|
| CSRD247 | 216 | 232 | HSC | 274 | 286 | ILST519 | 152 | 154 | ILST687 | 139 | 141 |
| INRA005 | 115 | 115 | INRA023 | 197 | 211 | INRA063 | 173 | 175 | MAF65 | 121 | 125 |
| McM527 | 152 | 164 | QairFCB2 | 97 | 99 | SRCRSP Z3 | 81 | 101 | SRCRSP 24 | 161 | 163 |
| SRCRSP 5 | 173 | 173 | SRCRSP 0 | 224 | 230 | | | | | | |

Based on samples and information received, this animal qualifies as an offspring of:
Sire: TOPAZ BASIL, Rego:AUSMURBASIL, Ear Tag:3T3 215 (683)
Dam:

Miniature Goat Breeders Assn
Certificate of Grad

| | | |
|---|--|--|
| Name: Zodiac Saffron ND37.5% | Sex: Female |  |
| Tag no: Red tag 1612 NI378405 | Eyes: Blue | |
| Breed: Australian Nigerian Dwarf | Adult Grade: | |
| Rec No: ND4629D37.5 | Adult Height: | |
| Born: 12/08/2016 | Ear Type: | |
| Microchip No: | Horns: Disbudded | |
| DNA Appr. No: UQ#716 | Height: 1 Year: 2 Year: 3 Year: Transfer: | |

GGS:
GS:AGS Pecan Knoll Bob The Builder USA ND 21/02/2007 Grade PB Parentage Record B
GGD:AGS HBF M Impish Grin Nigerian Dwarf Parentage Record
SIRE:ADG Topaz Basil ND75% 31/10/2015 Australian Nigerian Dwarf ND4638D75 Height 49 c
GGS:AGS Dav+Lyn Appolossa US ND DNA 04/02/2007 Grade PB Parentage Record
GD:ADG Topaz Pepper ND50 07/10/2014 Australian Nigerian Dwarf Parentage Record
GGD:ADG Topaz Park Vanilla BA 08/09/2013 British Alpine Parentage Record

- If you have any queries or are not sure about the process, contact Renee Molloy he is very helpful and can answer or explain anything you are not sure of.

Renee Molloy

Customer Service & Sample Reception Manager

Geneseek Australasia

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