



media release

Thursday 26 February 2015

Photo call: Petit Basset Griffon Vendéen, belonging to 2013 Crufts Best In Show Winner, Gavin Robertson, providing the first official DNA sample for the POAG test.

Thursday 5 March 2015, 11:30am, stand 55, Hall 3, Crufts.

FIRST AHT DNA HEALTH TEST FOR CANINE GLAUCOMA LAUNCHED
Petit Basset Griffon Vendéen owners will now be able to screen for primary open angle glaucoma (POAG) with a genetic test developed by the Kennel Club Genetics Centre at the Animal Health Trust

The Animal Health Trust (AHT) and the Kennel Club are pleased to announce a new DNA test for the genetic mutation causing primary open angle glaucoma (POAG) in Petit Basset Griffon Vendéens. Glaucoma is a painful and blinding disease associated with high pressure in the eye due to a build-up of fluid.

After several years of work using DNA samples provided by many supportive owners and breeders, The Kennel Club Genetics Centre at the AHT has identified the mutation that causes POAG in the Petit Basset Griffon Vendéen. The Petit Basset Griffon Vendéen is the only breed in the UK currently certified under the BVA/KC/ISDS Eye Scheme for POAG.

A DNA test has since been developed and will be launched at Crufts with a limited availability £6 off Crufts discount voucher. To collect a voucher interested parties should visit the AHT stand, 3-55. The test will be available to order from the Animal Health Trust DNA Testing Service from Thursday 5 March 2015 and the full cost will be £48.

Primary glaucoma is an inherited condition and is subdivided into two types: open angle glaucoma and closed angle glaucoma. In both forms, glaucoma results from reduced drainage of fluid within the eye, causing a build-up of pressure which, in turn, leads to pain and blindness. For closed

angle glaucoma (but not open angle glaucoma), a screening technique called gonioscopy can identify dogs at risk.

Dr. Cathryn Mellersh, Head of the Kennel Club Genetics Centre at the AHT, said: "We're incredibly pleased to be able to offer this new test. A lot of hard work went into collecting the samples and identifying the mutation, none of which would have been possible without the continued support of the Basset Griffon Vendéen Club.

"As there is no clinical test available to screen these dogs for POAG prior to the onset of the disease, it has been challenging for breeders to control. Now, any Petit Basset Griffon Vendéen can have the non-invasive DNA test, collected via a simple cheek swab, giving the owner peace of mind about both the dog's eye health and if it is a carrier of the genetic mutation. Hopefully, with responsible DNA testing and breeding, we will be able to eradicate this painful and blinding condition from the Petit Basset Griffon Vendéen population.

"This is the first DNA test we've launched for a form of canine glaucoma and it is testament to our highly skilled geneticists and our ability to work closely and effectively with breeders to collect representative samples to aid our research. Our next challenge is to investigate the genetics behind primary closed angle glaucoma which affects a greater number of dog breeds."

This DNA test could not have been developed without samples from healthy and affected dogs. Gavin Robertson, owner of Crufts 2013 Best in Show Winner, Petit Basset Griffon Vendéen, Jilly, and Chairman of the Basset Griffon Vandeen (BGV) Club, said: "Through years of hard work, hundreds of eye tests and the submission of DNA the BGV Club are absolutely delighted that Dr Cathryn Mellersh and her team at the Animal Health Trust have identified and carried out validation experiments on the DNA responsible for POAG in the Petit Basset Griffon Vendéen.

"Many will recall back in the early days the eye pressure tests which were undertaken at the RVC, the fund raising for a tonograph machine and the ongoing eye testing sessions and samples sent to the AHT of affected and unaffected PBGVs to aid the research.

"None of this would have been possible without the unstinting work of Mrs Vivien Phillips, Health Officer for Eyes; Professor Peter Bedford and Dr Cathryn Mellersh and her team. With this breakthrough it is hoped that with careful and responsible breeding Petit Basset Griffon Vendéen owners and breeders may start the process of eradicating this condition within this wonderful breed. As chairman of the BGV club we will do all we can to encourage all Petit Basset Griffon Vendéens to be tested in the UK and overseas."

Caroline Kisko, Kennel Club Secretary, said: "The development of the test for primary open angle glaucoma is a prime example of the fantastic work being carried out by the Kennel Club Genetics Centre at the AHT and we are thrilled that owners and breeders of PBGVs will be able to utilise this to help protect the health of this charming breed.

"We commend all the hard work that went in to making this possible and are excited that this breakthrough means there is a real possibility of this condition being eliminated from the breed in the future."

To order the POAG test from Thursday 5 March, please visit www.ahtdnatesting.co.uk.

Ends

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Additional notes:

- **How the DNA test works:**

The disorder shows an autosomal recessive mode of inheritance, which means that two copies of the defective gene (one inherited from each parent) have to be present for a dog to be affected by the disease. Individuals with one copy of the defective gene and one copy of the normal gene, called carriers, show no signs of disease but can pass the defective gene onto their offspring. When two carriers are crossed, 25% (on average) of the offspring will be affected by the disease, 25% will be clear and the remaining 50% will be carriers.

After DNA testing the results will be defined as follows:

CLEAR: The dog has 2 copies of the normal gene and will neither develop POAG, nor pass a copy of the POAG gene to any of its offspring.

CARRIER: The dog has one copy of the normal gene and one copy of the mutant gene that causes POAG. It will not develop POAG but will pass on the POAG gene to 50% (on average) of its offspring.

AFFECTED: The dog has two copies of the POAG mutation and is affected with POAG.

- **Breeding Advice:**

Carriers can still be bred to clear dogs. On average, 50% of such a litter will be clear and 50% carriers; there can be no affected dogs produced from such a mating. Pups which will

be used for breeding can themselves be DNA tested to determine whether they are clear or carrier of POAG.

- The **Animal Health Trust** is one of the UK's leading veterinary charities, employing more than 200 scientists, vets and support workers. It aims to improve the health and welfare of horses, dogs and cats through research. It also provides specialist referral services and continuous education to vets. Visit our website at www.aht.org.uk
- The Kennel Club Charitable Trust has donated more than £8 million to help improve the lives of dogs since it was established in 1987. The Trust awards grants to welfare organisations which make a difference to dogs' lives, such as Safe and Sound, and also provides financial support to canine scientific research and support charities.
- Geneticists from the AHT will be on the Kennel Club Stand for the duration of Crufts. Along with senior personnel from the Kennel Club, they will be on hand to answer queries regarding the Genetics Centre.