A GENTIC METHOD FOR IDENTIFICATION & VERIFICATION OF PARENTAGE & INDIVIDUALITY OF LOVEBIRDS

A DNA databank for verification of nine lovebird species

Technology Overview

The parentage verification or individuality identification test identifies specific gene markers that are highly variable and inherited from both parents. It does not determine species or breed type. With the list of DNA databank, a molecular biology laboratory can determine the genotype of an individual bird (identify an individual) using any available genotyping platform such as real-time PCR, Mass Array genotyping system or sequencing. By comparing the genotypes of the two possible parents with that of the offspring, parentage is confirmed. Therefore, it is one test/set of markers with two applications.

Additional databank applications can be built based of the parentage data, such as colour determination. The technology provides an opportunity for blockchain technology in the speciality animal breeding space.

Market Opportunity

The global animal genetics market will grow over USD $6.5 billion by 2024. The DNA databank team at NWU would like to capture their part of this market share through developing niche applications for which there exists no competition elsewhere. The lovebird genetic verification test is the first successful commercial step in this direction.

There is a significant need from breeders to determine the possibility of colour from breeding pairs. The next step would be to develop a DNA databank to determine the possibility of colours. Breeders are interested to breed specific colours that yield much higher profits. The above data coupled with the parentage data can be invaluable in a blockchain verification system between breeders (buyers & sellers) and the laboratories performing the tests. For the first time there can be a paper trail of each species bred and validated.

The above opportunity can also be implemented in other niche animal genetics markets, with the potential to yield profits.

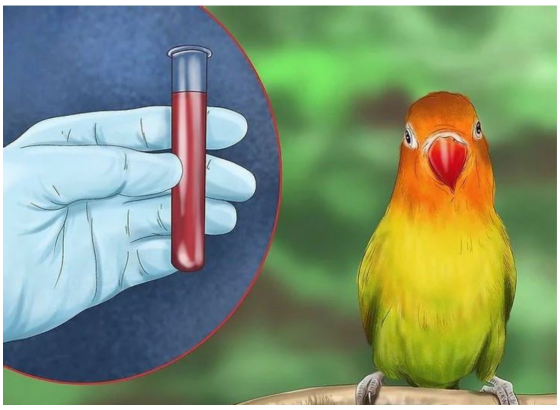
Technology Benefits

- The only databank in the world containing lovebird parentage verification information for nine different lovebird species.
- The verification of parentage data will deter fraud in the professional species breeder industry.

Project status

A patent has been granted for the technology.

We are currently seeking partners to license the technology for commercialization.



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