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NAKED OR FEATHERLESS CHICKEN- IS IT SO?

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The world's first naked or featherless chicken was genetically produced at Rehovot Agronomy Institute, Israel, by Israel geneticist Avigdor Cahaner and it was known to be first appeared in 2002. They are very strange, terrific breed of chicken and it was a result of 50 years of efforts of natural mating methods. It was produced by crossbreeding between a broiler and naked neck chicken, where crossbreeding involves crossing of two pure breeds of animals/birds to exploit heterosis and improve production performance. They are not genetically modified breeds of birds, but some admit it was produced by prototype, a genetic mutation which was created.

Other names: nude chicken, slippery chicken, featherless GMO chickens,

Genes

There are two set of alleles for creation of featherless chicken. One is naked neck gene (NA) and another is scaleless gene (Sc). The Scaleless gene (Sc) at the homozygous recessive stage will eliminate the development of feather and thus featherless chicken produced.

Why to be Produced??

Naked neck chicken has already known variety of bird for their conduction, convection purpose which is usually tolerant to heat stress condition that it is rearing in warm countries like India, where the feathered chicken can't tolerate much heat stress and need of cooling systems like environmentally controlled houses, sprinklers which fetch more cost of rearing and production and researchers claim that these chickens have no harm to human health.

To prevent genetically altered hens from becoming overheated due to their fast heart rate, which is known to be faster than normal chicken.

Advantages of Naked Chicken

1. Faster in growth compared to broilers
2. Their meat with low fat content
3. Low calorific value of meat.
4. Their energy need in feed is less and require comparatively less feed to produce the same amount of meat of broilers
5. They can be better adopted in hot climates
6. More ecofriendly breeds as there are no need of plucking, a process that contaminates large quantities of water with feathers and fat tissues.
7. Naked chicken meat processing does not involve plucking, so it saves additional money in processing plants running.

Disadvantages

1. Major disadvantage lies in welfare aspect as it is seen to be inhumane.
2. They are hard to survive in cold climatic regions
3. Random genetic mutation shows that they suffer more than the normal birds.
4. No protection from ectoparasites like mosquitoes, ants, gnats, bugs, centipedes
5. No protection from dust, dirt, mud.
6. More susceptible to sunburns.
7. They must not be kept in direct sunlight.
8. More susceptible to temperature variations as like young chicks
9. Natural mating will be difficult as the rooster will cause injury to bare skin with sharp beak and claws.
10. Additional work load in clipping the claws of males needed.
11. Male sometime fail to mate, as the male mating behaviour includes strutting where feather is needed (flapping wings, showing them off etc.)
12. Brooding of chicks will be difficult as no feather to provide heat to chicks

"It's a prime example of sick science and the suggestion that it would be an improvement for developing countries is obscene." Said by Joyce D'Silva of Compassion in world farming.



Fig: Image of featherless chicken

Conclusion

Even though breeding systems were used for producing those type of breeds, acceptance rate by the consumers will not be successful due to fact of fear of hormonal usage, unusual animals, fear on health impact. So still further study and also those not altering the nature can be used efficiently.

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