

Artificial Insemination

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Description

Artificial insemination, or A.I. is the process by which sperm is placed into the reproductive tract of a female for the purpose of impregnating the female by using means other than sexual intercourse or natural insemination.

Application

The first reports of the use of A.I. in budgerigars I found in an article in Budgerigar World, November 1986 page 22. The project was a part of the research programme conducted under the auspices of the "Budgerigar World" Research Fund, an

organization created jointly with the Zoological Society of London and “Budgerigar World”. During the course of the last 4 years ,different areas of the reproductive biology of budgerigars have been studied including the male testicular cycle, methods of semen collection, spermatozoa ultrastructure, seminal plasma composition and semen dilution and freezing (1) Dr. Jamie Samour and Janet Markham used for their experiment fresh and frozen sperm (3 weeks at minus 196 Degrees Centigrade in liquid nitrogen). Both had been successful.

Meanwhile the use of A.I. in budgerigars has been spread all over the World especially in countries where import of living birds is prohibited. At the same time some people saw the commercial value of A.I. and started to promote it with video's , CD, lectures in budgie clubs etc. **Question is : Do we need A.I. to be successful in our hobby ?** To be able to answer this question, I contacted both experienced breeders and less experienced breeders. Depending of where they were living I found a majority pro in the countries who couldn't import living birds, for the other countries the result was 50/50. Remarkably was that less experienced breeders where pro A.I. and experienced breeders often have some remarks. One of those remarks was : “A.I is a great benefit to the hobby in skilled hands...I don't use it, it's too much hassle” This is a very important thought and demonstrate how an experienced breeder is thinking about A.I. Other experienced breeders preferred not to answer my question and that is in fact also an answer that could be interpreted as positive or negative.

Following some other thoughts about A.I. :

- A quality cock bird can be used to fertilise a few hens (P)
- If a cock or hen is injured or has a permanent lack than you can use A.I. (P)
- The danger is always there that unwanted genes and bad traits are transferred (C)
- A.I. using as a tool for saving endangered avian species (P and C) (in our hobby we don't use endangered species)
- If there is low fertility the infertility problem will increase naturally or by using A.I. (C)
- If a hen or cock is disformed the disformed gene will be spread in the aviary by using A.I. (C)
- I can keep lesser cock birds and still have the same quality of youngsters (P)
- It is not so easy as I thought, I damaged some of my best cocks (C)

C = con
P = pro

Practice

- * Pair the two birds or use an infertile cock to a required hen
- * Remove the feathers around the vent of both cock and hen
- * Wait till the dropping of the hen become large and loose in appearance



Capillary tube

- * Have a glass capillary tube ready
- * Catch the cock bird and hold it in a way that you can easily reach the vent area. A soft squeezing motion that “milks” the vent is used to obtain semen. Don’t squeeze too hard because that is dangerous. The semen appears as a droplet on the vent within 3 or 4 squeezes. If not, the cock bird has no semen available. If the semen is present, let the capillary tube draw it in.
- * Catch the hen and stroke the hen under the vent to empty the cloaca of all faecal material.
- * Pull the capillary tube downward towards to expose the oviduct opening
- * Blow into the tube to deposit a drop of semen near the oviduct opening. The female’s vent will react immediately on the droplet of semen and draw the semen into the oviduct.

Remarks

- It seems to be easy to use A.I. but in my opinion it is not without danger. As you can see that the birds have to be in good condition to do successful A.I., so why using A.I. If you needed a healthy cock and hen. Let nature do his task.
- People say it is a benefit when the cock bird did not fertilize on a natural way. My question is do you want youngsters from a bird who wasn’t fertilized and what will you do with the youngsters later on? I think that you bring into the aviary a lot of difficulties.
- Using A.I. will also say that we only take sperm from the best cocks but this also indicates that all the birds will be genetically closer to each other and we have already seen what the result here is. (feather problems, cysts, not flying birds etc.)
- A.I. is just a half way tool in the breeding program. It would be the hen who has to complete the task with no guarantee at all.
- For me A.I. has only a commercial benefit in most of the cases.
- Keep the word of an experienced breeder in mind “it is too much hassle”

References

- (1) Budgerigar World, November 1986, page 22