

Successful Breeding of *Poicephalus rueppellii* over a 23-year Period Using an Organic Formulated Diet

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We have maintained a successful psittacine breeding facility for various species of parrots and parakeets since 1985 and can claim the first breeding of *Poicephalus rueppellii* in the Benelux Union (Belgium, Netherlands, Luxembourg).

During the 1990's we changed the management of the facility to improve the well being of the birds. One of the biggest changes was the incorporation of an organic formulated diet as the main course for all our birds. At that time the avian society wasn't aware of the positive aspects of using organic formulated diets and was mainly focused on the traditional seed diets.

General Considerations

International articles concerning avian feeding trials confirm the difficulty of incorporating the appropriate number of birds so that statistical conclusions can be made. This paper compares the breeding results of the *Poicephalus* Studbook of the Netherlands (PSN), up until 1-1-2013 when they stopped keeping records, with our 23 years' experience of using Harrison's Bird Foods (HBF) as the main course diet for our *Poicephalus* parrots.

Various Comparisons

In the statistical study, comparisons have been made between the outcome of our private breeding station and the PSN. The comparisons included the number of:

- Eggs produced
- Eggs fertilized
- Eggs per breeding cycle
- Hatchlings from the eggs
- Birds that have "flown out"

In all cases, it can be concluded that the results of our private breeding station are dramatically better than those of the PSN. If we look now more than 11 years later this is still the case.

The production at our facility was slightly decreased based on the fact that in 2010 we started with many new young birds: 2.95 (SD 0.41) birds as an average over a period of 23 years against 1.1 young birds (SD 0.65) for the PSN.

Also on the number of fertilized eggs we see dramatic differences. At our breeding station we see a fertilized percentage of 98.5% against 65% for the PSN group. (For both groups we excluded the first clutch they laid. We see with in the *Poicephalus* species in general that the first clutch has 90% (SD 0.75) of infertile eggs.)

The hatching percentage is the same as the fertilized percentage for my facility. This means that every fertile egg hatched. The hatching rate of the birds inside the PSN database was 70%.

If you look at the number of eggs produced per breeding cycle you see that in our facility, we have 0.5 (SD 0.05) more per cycle. It is difficult to prove that there is a statistical difference between our facility and the PSN data.

Comparison of Price / Investments Needed in Feed

Over the last 23 years we have accumulated information that verifies a well founded financial basis for the use of HBF. In my experience of giving lectures to bird societies all over the world, breeders tend to compare 25 kg seeds with 25 kg of organic formulated pellets. From a financial business model perspective, they need to compare the total amount of food provided to the birds on a daily basis. Many breeders don't know the cost for feeding their birds on a daily, weekly or yearly basis.

The table below* compares a conventional diet with HBF for one pair of *Poicephalus rueppellii* per day. In this case we adjusted the amount of HBF from 90% of the body weight to 75%.

In 2010 we started providing organic red palm fruit oil during the breeding season as well as HBF Power Treats and HBF Juvenile Formula powder to the mature birds. We make little Juvenile balls with some fine nuts in it. With this supplementation, we have noticed that the young birds grow faster and that the digestion appears to be improved.

Pair of ruppells per day	Conventional	Pellets HBF
Price per day	€ 0,12 (\$ 0.13)	€ 0,30 (\$ 0.33)
Supplements per day	€ 0,10 (\$ 0.11)	€ 0,08 (\$ 0.09)
Total per day	€ 0,22 (\$ 0.24)	€ 0,38 (\$ 0.41)
Total per year	€ 80,30 (\$ 87.35)	€ 138,70 (\$ 150.88)
Mean youngsters	1.1	2.95
Price per young	€ 650 (\$ 707.06)	€ 650 (\$ 707.06)
Total per year	€ 715 (\$ 777.77)	€ 1.917,50 (\$ 2085.83)
Profit per year	€ 634,70 (\$ 690.42)	€ 1.778,80 (\$ 1934.95)
Difference +	€ 1.144,10 (\$ 1244.53)	

*Online currency conversion 2/12/20: 1€ = \$1.09

Additional benefits of using this feeding plan include:

- The birds need fewer veterinary check-ups.
- The young birds become independent faster.
- There are NO dead parent birds due to breeding problems.
- There is little need to add new birds, therefore there is little chance to introduce infectious diseases into the existing population.
- If we do introduce birds to our collection (e.g., the endangered *Poicephalus robustus*), they easily accept the HBF products.
- There are fewer costs with additional health checks if you need a replacement of birds. In our facility we check all new birds

twice — before and after a quarantine period — which may cost up to €500 per bird.

Conclusion

We can conclude that our initial results published in 2004* after 12 years of using HBF as the main organic diet for the *Poicephalus* parrots at our facility can be confirmed following another 11 years, for a total of 23 years.

We can also see that new birds brought into our facility quickly accept the HBF pellets as their main course. So the acceptance of the pellets is high.

With the addition of the red palm fruit oil supplement we also see an improvement in the shine of the feathers and upper and lower beak. Birds are looking even better than before.

* van Kooten, Eric A.W.: Advances in Companion Bird Nutrition. Proc Bavarian State Institute for Health and Food Safety. Oberschleissheim, Germany. March, 2004.

Sidebar:

Handfeeding is done only rarely when the parents do not feed the youngsters. Normally we use HBF Neonate Formula for young *Poicephalus* parrots until 14-20 days of age, and HBF Juvenile Formula after that. Approximately two weeks before weaning, we add HBF High Potency Fine. At this point it is easy to wean them onto High Potency Coarse.

HBF Power Treats are used according to the recommended dose during the molting period and at the beginning of the breeding season.

HBF Juvenile Formula is used during molting (twice a week) and the breeding season (three times a week). During the weaning process, we daily offer little "balls" made from Juvenile Formula with the addition of some fine nuts. We mix Juvenile mush with sprouted seeds during the breeding season three times a week.