# ARK - Arizona Rivulin Keepers 

## The Scheel Letters, No. 38

## Crossings

The female hybrid Aphyosemion cognatum/schoutedeni was back-crossed to a male "cognatum" and a "schoutedeni". With "cognatum" male I got quite a lot of eggs, but only 9 of these did not catch fungus. After 7 days the development inside the eggs is not at all fine. 1 egg has a small, dying embryo, circulation of blood stopped. The other 6 eggs still have live embryos, but the development is very unequal, only 1-2 eggs may give a livable embryo. After 13 days all the eggs have dead or dying embryo. The same sad story as in crosses with species which no doubt are not closely related, the embryo cannot develop a blood system that will work. Why?? You remember that the cross that gave those 11 hybrid females did not give any difficulties.

With "schoutedeni" male I also got several eggs using 3 hybrid females and 2 "schoutedeni" males. 28 of these eggs did not catch fungus. After 4 days the eggs showed different development. After 13 days one fry hatched, but has big yolk sack. After 18 days totally 4 fry are out, the first did absorb its yolk. 17 eggs are still there, 3 of these are promising, fry is big and there is circulation of blood. 1 is small, but fine circulation of blood. 5 big embryos have stopped any circulation of blood, masses of blood elements are blocking up at several points on the yolk sack. 8 eggs had small and dead embryo. A few days later one more fry hatched. All 5 are growing fine. Again there are great differences in the development of the F2. Some eggs give rather fine results and some give very bad results.

The hybrid male Aphyosemion schoutedeni/calliurum is a beauty. He is bigger and stronger than the much older "schoutedeni" males in my stock. He also has brighter colors: more red dots, in rows on body side, more yellow color in dorsal and anal. The female is getting more and more male-like in color. It does not spawn a single egg. The male is also fertile.

