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# ARK - Arizona Rivulin Keepers

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## The Scheel Letters, No. 28

### Egg development in *Aphyosemion sjoestedti*

One pair of adults (male more than 12 months, female young) spawned from 16 Aug. to 04 Oct. 1959. In order to stop development (and kill eggs which perhaps had already started development) until after my holidays, eggs were stored under more than 2 inches of fine mud under water in a closed glass until 30 Oct. 59. Then they were washed out and counted: 426 eggs, all transparent.

- 19 Dec. 59 (50 days) 19 eggs had big pigmented embryo, 10 eggs had small pigmented embryo. 369 eggs had no or only a very small and unpigmented embryo (28 eggs only got fungus).
- 27 Dec. 59 another 14 eggs with pigmented embryo.
- 29 Dec. 59 another 16 ditto.
- 01 Jan. 60 another 42.
- 03 Jan. 60 another 12.
- 06 Jan. 60 another 17 plus 79 smaller, pigmented embryos (only visible under magnifier), 188 eggs still have no pigmented embryo, but in most the embryo is seen.

Temperature, as usual, 20-23 C during the whole period. That is to say that after 67 days only 130 (33%) have finished or are about to finish their development, 79 eggs (20%) will be ready within a week or so, whereas 188 eggs are more or less on their way also. In the glass where I store the eggs that show pigmented embryo until now 5-6 fry hatched without any help (in water) and none of these were belly sliders.

Little information has been published on the egg development in this interesting species. Foersch (Mitteilungsblatt der Confederation Europeanischer Vivarianer. 2. Jahrgang 1956) writes: eggs that have been kept in slightly moist peat were washed out after several months. After 6-7 months they did not show any development. 4 weeks later, when he put water on that peat, many fry hatched without any yolk sack.

Using the drying up procedure, I had these results: spawning until beginning of June 1957. Peat dried at once and stored in big plastic box.

- 23 July 57: water on it, no fry. Dried after a few days.
- 26 Aug. 57: water on it, no fry. Dried on 29 Aug. 57.
- 24 Nov. 57: water on peat, 4 fry only. Later on no more fry came out from another drying and

watering.

- Spawning until 20 July 57: peat removed and dried, stored in 2 liter box airtight.
- 13 Mar. 58: water on peat, 34 fry hatched. No belly sliders. 237 days of unbroken drying.

### **Egg development in *Pterolebias longipinnis***

- One pair was spawning until 07 Oct. 59: then eggs were stored in water under inches of fine mud until 31 Oct.59, when they were washed out and counted: 55 eggs.
- On 14 Nov. 59 (15 days) 13 eggs showed pigmented embryo and 40 had unpigmented embryo or no embryo.
- During the first week of Dec. 59 all eggs were black, on 28 Dec. 59 I dared not to keep these black eggs in water any more, so they were pipetted into slightly moist peat.
- 04 Jan. 60 (one week of drying) I added water and had 50 sound fry and one belly slider.

### **Egg development in *Nothobranchius***

**rachovi** is considered to be much slower in the development than any other aquarium kept species.

- I had 30 eggs from Foersch. These were spawned between 15 and 30 June 59. I put water on peat on 01 Aug. 59: 1 belly slider. Eggs washed out: 4 with a small, but visible embryo, 22 true resting eggs. Kept all eggs in water for further control. No development was seen, so they were dried up in little moist peat on 15 Aug. 59.
- Peat in water on 29 Oct.: no fry, 15 eggs, all with a small embryo were washed out. Kept in water.
- 14 Nov. 59 nearly all eggs have big and pigmented embryo. 23 Nov. 59 pipetted into slightly moist peat.
- 20 Dec. 59 water on peat (plus little dry food). They hatch, but all are belly sliders.

Ove Larsen's pair (also Roloff's stock): 23 Sep. 59 64 eggs without peat in water for control. 06 Jan. 60 6 eggs have pigmented embryo, 49 have no embryo or a transparent embryo. 105 days. Please compare with the following:

**palmquisti** (Tropicarium stock).

- One pair spawning until 06 Oct. 59: eggs stored in water under inches of fine mud until 29 Oct. 59. Eggs washed out, 156 transparent eggs.
- On 12 Nov. 59: 113 have pigmented embryo, 20 have no embryo or unpigmented embryo. About 01 Dec. all eggs were ripe.

**guentheri** (Aquarium Hamburg stock).

- One pair spawning as "palmquisti". Stored under fine mud and rewashed 29 Oct. 59: 105 eggs. 12 Nov. 59 only a few eggs have no pigmented embryo.