**What you need to know beforehand.**

I used for my experiment a final concentration of 20 mg/L riboflavin. I started with 5mg/L and gradualy increased it (see protocol) till it was 20 mg/L. If you go too quick the plants will start to turn yellow or get lesions.

Ribfolavin in 5 mM KOH solution is yellow, when you add it to the hydroponics solution it will turn orange.

I always used plants from seeds but you can also use cuttings.

I have added the dates and days that I increased the riboflavin so if you have a question I can look it up easier.

**Riboflavine protocol nymphs**

Riboflavine stock

100 mg roboflavine in 1 ml 5mM KOH, and shake (solution will turn yellow0

Control solution

5 mM KOH

1) 1955 seeds were germinated either on soil or between 2 wet paper tissues.

2) After 5 to 7 days the stem of the seedlings were wrapped into cotton and transferred to the hydroponics system (0,5 ml of each solution per 1 L water)

3) Hydroponics solutions was changed 3x a week

4)when plants are taller than 15 cm, I used 1ml of each hydroponics solution to 1 L water

(what I did is 2.5-5 ml of each solution in a 50 ml tube and add this to 5 liters of water. There is a 5 L container in the greenhouse)

5) After 4 weeks of being on hydroponics riboflavine was added 5 mg per 1l (50 microL) and 50 WF females ( wednesday 12/10/2016).

6) Two days after I removed the WFs and refreshed the hydroponics solution with 10 mg/L riboflavin (Friday 14/10/2016).

7) Three days later after changing to 10 mg/L I refreshed the hydroponics and added 15 mg/l riboflavin (Monday 17/10/2016)

8) Two days later after changing to 15 mg/L I refreshed the hydroponics and added 20 mg/L riboflavin (Wednesday 19/10/2016) and counted the nymphs.

9) on 21/10/2016 I had crawlers, on 24/10/2016 2nd instar, on 26/10/2016 3rd instar, on 28/10/2016 3rd instar, on 31/10/2016to 04-11-2016 pulpa and adults.