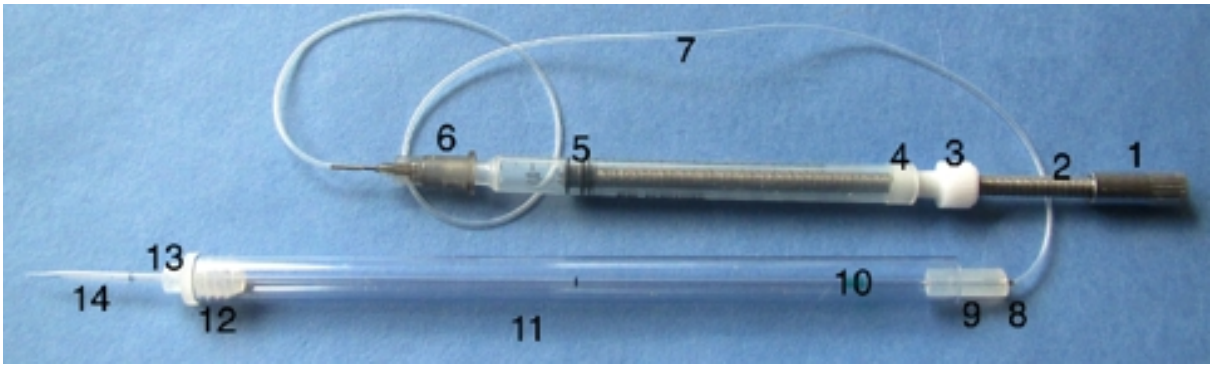
HARBO INSEMINATION SYRINGE, modified

The HARBO insemination syringe is widely used in the USA and can be identified by the short insemination needle connected to a 50µl disposable pipette with a hose coupler, and both parts being inserted into an Ø 8 mm glass tube. The glass tube is connected to the syringe fastener of the insemination device. The syringe cylinder with the plunger on the other hand is separately attached to the magnetic base. The two syringe parts are connected with a thin PVC infusion hose.

The large sperm capacity is an advantage (the entire disposable pipette can be used). The pipette tubes are great for shipping sperm. The short rubber cushioned insemination needles are less likely to break off.

The disadvantage compared to the SCHLEY syringe is that the HARBO syringe is made up of many components and the hose will not tolerate heat sterilization. Before use, clean as follows: Rinse with 70% isopropanol, then push sterile distilled through followed by a thinning solution (0.9% common salt solution). During longer periods of non-use, disassemble and store dry.



HARBO insemination syringe per SCHLEY for the compact unit, item No. 1.04 when desired.

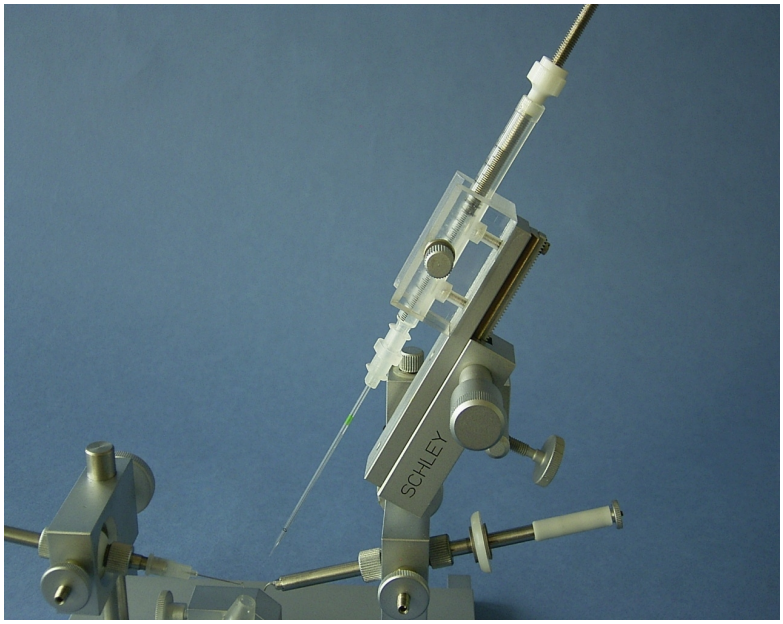
1= control knob; **2**= screw spindle; **3**= sleeve; **4**= syringe cylinder; **5**= plug; **6**= blunted connector needle 0,7 mm for hose; **7**= hose Ø 1 mm / 0,5 mm inside; **8**= steel-tube 0,7mm; **9**= silicone connector Ø 5 mm/ 1 inside; **10**= capillary storage tube 50 l, long type 125 mm, Ø 1,5 mm;**11**=protective barrel Ø 8 mm/ 7 inside, 130 mm long; **12**=support stuff; **13**= silicon hose Ø 5 mm/ 1 inside; **14**= glass tip Ø 1,5 x 30 mm.
Note: 10 and 11 must have no sharpe edge).

The syringe cylinder is separately attached to the magnetic holder via spring clip. It's easier to push than impress. Under the knob must be room for the hand.

The sperm doses for two portions are determined by comparing to a measuring strip on or at the turn of the knob with a marker.

1/2 turn = 6 microliter
3/4 turn = 9 microliter
1 turn at the Harbo-syringe 12 microliter

Sufficiently for 1 queen = 8 - 12 microliter (µl)
An 8 µl dose requires 10 mm sperm column (pulled over the syringe).



The cylinders directly on the device without hose.
The Lueradapter (2 x female) connects the glass tip with syringe.

Resources:

HARBO: Apimondia Congress Proc. XXIV (1973) 338-344;
HARBO: Ann. Ent. Soc. Am. (1973) 67:2:191-194

Peter Schley, 1.1.2014