

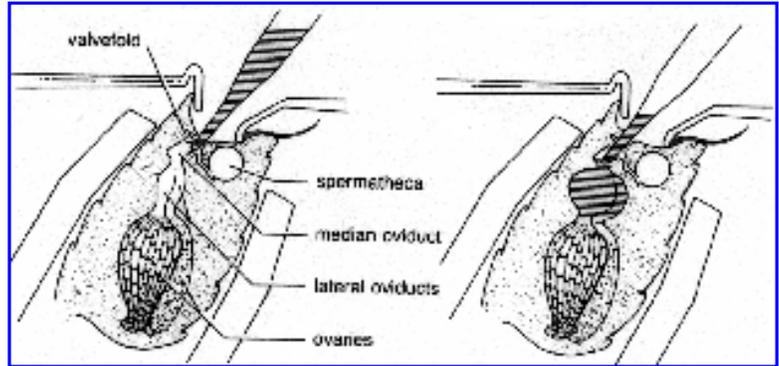
Washington State University Honey Bee Program

INSEMINATION OF THE QUEEN

Susan Cobey

To expose the vaginal orifice of the queen, the abdominal plates are separated using a pair of hooks or forceps. The large sting structure is lifted up and dorsally.

The valvifold, a stretchy flap of tissue covering the median oviduct, is bypassed. Semen is inserted directly into the median oviduct.



The syringe tip is used to bypass the valvifold. The tip is slipped beneath the valvifold and lifted ventrally. The angle of the syringe, and a slight "zigzag" movement is used to maneuver around the valvifold.

Position the syringe tip dorsally above the "V", defining the vaginal orifice.



Insert the tip about 0.5 mm, slightly forward of the apex of the "V". Positioned correctly, the tip slips easily past the valvifold without resistance. Insert the tip another 0.5 to 1.0 mm into the median oviduct.

Bypassing the valvifold allows passage of the tip into the median oviduct. Test placement of the tip, preceding the insemination with a drop of saline, then insert a measured amount of semen, 8 to 10 μ l is the standard dose per queen.



With practice, the insertion of semen is preformed quickly and precisely, requiring only seconds per queen.

There are a variety of tools to choose from. Use is based on personal preference.

