

ANIMAL REPRODUCTION SYSTEMS



14395 Ramona Ave. Chino, CA 91710



Part No. BC-101/25

Introduction

The ARS Disposable Bubbler Comb is designed to quickly and easily insert an airspace into 0.5 ml semen freezing straws before sealing with sealing powder. This airspace is necessary in order to provide ample room for the liquid inside the straw to expand during the freezing process. Detailed instructions for the preparation and freezing of stallion semen can be found starting on page 99 of the book *Techniques for Collection, Evaluation and Insemination of Stallion Semen, 3rd Edition* which is available from ARS (P/N 537-342C).

Instructions For Use

The following instructions show the steps necessary to use the ARS Bubbler Comb to insert an airspace into 0.5 ml freezing straws.

- 1. Attach the ARS Bubbler Comb onto the top of a standard 50 ml conical centrifuge tube by depressing the sides of the tube and insert the Bubbler Comb into the tube (see Figure 1).
- 2. Once released, the Bubbler Comb will have a snug fit in the centrifuge tube (see Figure 2).
- 3. Place the centrifuge tube into a rack to hold it upright during use (see Figure 3).
- 4. As straws are filled they should be placed onto the prongs of the ARS Bubbler Comb (see Figure 4).
- 5. Push down on the straws until they are flush with the base of the Bubbler Comb (see Figure 5). This will create a defined air space.
- 6. Repeat until the Bubbler Comb has been filled (see Figure 6).
- Once the Bubbler Comb has been filled, remove straws and tamp sealing powder into airspace until plug is approximately 1/4 inch inside the straw (see Figure 7). There should be a small bubble of air remaining inside the straw (see Figure 8).
- 8. Dip straw in water to seal the plug. Gently shake straw to get the bubble near the center of the straw (see Figure 9).
- 9. Repeat steps 5 through 8 until all straws have been sealed.
- 10. Once the supply of extended semen has been exhausted, semen drained from the Bubbler Comb (See Figure 10) can be used to fill additional straws. Simply remove the Bubbler Comb and place it on a different centrifuge tube and repeat steps 1 through 9.
- 11. Discard Bubbler Comb once all straws have been sealed. It is recommended that a new Bubbler Comb be used for each collection.



Figure 1. Insert Bubbler Comb into centrifuge tube (P/N 537-742/25).



Figure 3. Place centrifuge tube in a rack. The E-Z Freezin[®] Packet Stand (P/N EZF-PS) is shown here.

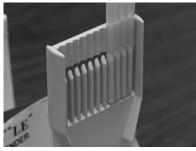


Figure 5. Push down on straws until they are flush with the base.



Figure 7. Seal straws with sealing powder (P/N 537-671).



Figure 2. Bubbler Comb should fit snuggly inside tube.



Figure 4. Allign filled straws (P/N 537-670-CLE) with guides on the ARS Bubbler Comb.



Figure 6. Repeat until the ARS Bubbler Comb has been filled.

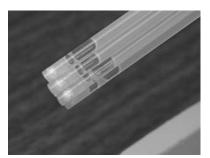


Figure 8. After sealing, a small air bubble should remain in the straw.



Figure 9. Gently shake straws until air buble is in the center of the straw.



Figure 10. Drainage in tube with bubbler comb can be used to fill additional straws.

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