# INSECT RELEASE DEVICES

## FIELD

**[0001]** The present application generally relates to devices to release insects into an environment.

## BACKGROUND

**[0002]** All continents except Antarctica suffer from the plague of mosquito-vectored diseases. Various techniques for the control of mosquito populations involve the generation of sterile male insects for release into the wild for mating with local females. These techniques may employ systems for releasing the reared insects into the wild.

## SUMMARY

**[0003]** Various examples are described for insect release devices. One example insect release device includes a vessel defining a volume, the vessel comprises first and second surfaces substantially opposite each other, the first surface defining an opening into the volume; a population of insect larvae or pupae or adult insects disposed within the volume; and a seal positioned to sufficiently obstruct the opening to prevent an adult insect from passing through the opening, the seal adhered to the first surface.

**[0004]** Another example insect release device includes a vessel defining a volume; a population of insect larvae or pupae or adult insects disposed within the volume; wherein the vessel is permanently sealed, and wherein release of the insect larvae or pupae or adult insects occurs upon rupture of the vessel.

**[0005]** A further example insect release system includes an insect release device comprising: a cylindrical tube defining a volume, the cylindrical tube having first and second ends; a population of insect larvae or pupae or adult insects disposed within the volume; a substantially conical end member coupled to and sealing the first end of the cylindrical tube, the substantially conical end member constructed of a material having a first thickness, the substantially conical end member defining a groove running around the edge of an inner or outer surface, the groove creating a second thickness of the material thinner than the first thickness; and an end member coupled to and sealing the second end of the cylindrical tube.