Ovitrap surveillance – excerpt from Fonseca et al 2013 – in press in *Pest Management Science*[1].

To assess the usefulness, compared to the BGS traps, of a less expensive trap that has already been used extensively to survey and model *Ae. albopictus*[2-4] we deployed oviposition cups (ovitraps) in the same houses/backyards as the BGS traps. The ovitraps were set and collected weekly when the location was visited for BGS trap deployment and collections. The ovitraps were 400 ml dark green plastic cemetery vases (Eaton Brothers Corp., Hamburg, NY) that were staked into the ground to reduce the probability of being disturbed by lawn maintenance activities, wildlife, or environmental conditions. The cups were placed at least 5m away from existing BGS traps when possible and not next to productive larval habitats (i.e., tires). The ovitraps were filled with 300 ml of oak leaf infusion and germination paper was placed to cover the inside surface. Two small holes were predrilled above the 300 ml water level to prevent the vases from being completely filled with water after a rain event, which would reduce the oviposition surface to zero. We prepared the ovitrap infusion by mixing 5 g of dry oak leafs per 8 L of tap water in large (>50 L) trashcans. Oak leaves were used because previous studies have reported that oak leaf infusions elicit oviposition responses from container-inhabiting *Aedes* mosquitoes[5]. To prepare the infusion, fallen white oak (*Quercus alba*) leaves were collected at a single site and used throughout the season in both counties. The oak leaf infusion fermented for 1 week before use and any batch was in use for no more than 2 weeks, which means that we started a new infusion batch every 2 weeks. On the first trapping day (time zero), an ovitrap was placed in a shaded area of the yard and

remained in the same location for the duration of the mosquito season. When the traps were serviced, germination papers were collected, and cups were emptied and rinsed. New germination paper and oak leaf infusion were placed in the oviposition cups. Broken and stolen cemetery vases were replaced as required. Egg papers were placed in labeled plastic bags to maintain humidity and limit egg desiccation and taken to the laboratory. There, the number of *Ae. albopictus* eggs was counted under a dissection microscope and recorded. Because other species of *Aedes* in New Jersey such as *Ae. triseriatus* (Say), *Ae. atropalpus* (Coquillett), and *Ae. japonicus japonicus* (Theobald) will, like *Ae. albopictus,* oviposit in small water filled containers and because their eggs are not easy to identify by non-specialists, we chose to hatch all eggs and rear the larvae to third instar for identification using the key in Farajolahi and Price[6]. In particular, eggs of *Ae. japonicus,* another recently introduced species[7] are very similar to those of *Ae. albopictus* and their larvae are commonly found in sympatry in New Jersey[8]. In the laboratory, positive egg papers were submersed completely and kept under water for 7 days. We used 5 mg of ground rat chow/500 ml of tap water as a hatching stimulus and kept the containers at 27°C in an incubator.

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