up and bacteria growth. In addition, both powders and slurries tend to foul the aquatic environment over time, potentially harming part of the insect population.

## SUMMARY

**[0005]** Various examples are described for a reformatted insect food product for aquatic environments and methods for manufacturing and using that reformatted insect food product. An aspect of a reformatted insect food product includes a measured amount of a mixture of at least one nutrient source for a mosquito larvae or pupae formed into a dispensable unit, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder, wherein the measured amount of the mixture is encased in a dissolvable capsule that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae present in the aquatic environment.

**[0006]** An aspect of a method of manufacturing a reformatted insect food product includes creating a mixture comprising at least one nutrient source for a mosquito larvae or pupae, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder; separating out a measured amount of the mixture; placing the measured amount of the mixture into a dissolvable capsule casing that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae present in the aquatic environment; and sealing the dissolvable capsule casing.

**[0006a]** An aspect of a method of feeding a plurality of insect larvae a reformatted insect food product includes providing the reformatted insect food product, wherein the reformatted insect food product comprises: a measured amount of a mixture of at least one nutrient source for a mosquito larvae or pupae formed into a dispensable unit, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder, wherein the measured amount of the mixture is encased in a dissolvable capsule that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae

present in the aquatic environment; and distributing the reformatted insect food product to the plurality of insect larvae in the aquatic environment.

**[0007]** These illustrative examples are mentioned not to limit or define the scope of this disclosure, but rather to provide examples to aid understanding thereof. Illustrative examples are discussed in the Detailed Description, which provides further description. Advantages offered by various examples may be further understood by examining this specification.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0008]** The accompanying drawings, which are incorporated into and constitute a part of this specification, illustrate one or more certain examples and, together with the description of the example, serve to explain the principles and implementations of the certain examples.

**[0009]** Figures 1A and 1B show an example for a reformatted insect food product for aquatic environments according to this disclosure;

**[0010]** Figure 2 shows an example aquatic environment according to this disclosure;

**[0011]** Figures 3A-9 show other examples for a reformatted insect food product for aquatic environments according to this disclosure;

**[0012]** Figure 10 shows a flowchart for an example method for manufacturing a reformatted insect food product for aquatic environments according to this disclosure;

## CLAIMS

That which is claimed is:

1. A reformatted insect food product comprising a measured amount of a mixture of at least one nutrient source for a mosquito larvae or pupae formed into a dispensable unit, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder, wherein the measured amount of the mixture is encased in a dissolvable capsule that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae present in the aquatic environment.

2. The reformatted insect food product of claim 1, wherein the at least one nutrient source comprises at least one of cricket protein powder, bovine liver powder, or Tetramin®.

3. The reformatted insect food product of claim 1 or 2, wherein the mixture comprises substantially 50% bovine liver powder and substantially 50% cricket protein powder.

4. The reformatted insect food product of claim 1, wherein the dissolvable capsule is formulated to dissolve at a predetermined rate.

5. The reformatted insect food product of claim 1, wherein the dissolvable capsule is biologically inert.

6. The reformatted insect food product of claim 1, wherein the mixture further comprises a dissolvable binding substance formulated to dissolve at a predetermined rate.

7. The reformatted insect food product of claim 6, wherein the dissolvable binding substance comprises at least one of a starch, a sugar, an agar, a gelatin, or a pectin.

8. The reformatted insect food product of claim 6, wherein the dissolvable binding substance is biologically inert.

9. The reformatted insect food product of claim 6, wherein the dissolvable binding substance coats an outer surface of a formed mixture.

10. A method of manufacturing a reformatted insect food product comprising:

creating a mixture comprising at least one nutrient source for a mosquito larvae or pupae, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder;

separating out a measured amount of the mixture; and

placing the measured amount of the mixture into a dissolvable capsule casing that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae present in the aquatic environment; and

sealing the dissolvable capsule casing.

11. The method of claim 10, wherein the at least one nutrient source comprises at least one of cricket protein powder, bovine liver powder, or Tetramin®.

12. The method of claim 10 or 11, wherein the mixture comprises substantially 50% by weight bovine liver powder and substantially 50% by weight cricket protein powder.

13. The method of claim 10, further comprising mixing the measured amount of the mixture with a liquid to form a slurry.

14. The method of claim 10, further comprises:

providing at least two of the dissolvable capsule casings;

placing a first measured amount of the mixture into a first dissolvable capsule casing;

sealing the first dissolvable capsule casing;

placing a second measured amount of the mixture and the sealed first dissolvable capsule casing into a second dissolvable capsule casing; and

sealing the second dissolvable capsule casing.

15. The method of claim 10, further comprising adding a dissolvable binding substance to the mixture.

16. The method of claim 15, wherein the dissolvable binding substance comprises at least one of a starch, a sugar, an agar, a gelatin, or a pectin.

17. A method of feeding a plurality of insect larvae a reformatted insect food product comprising:

providing the reformatted insect food product, wherein the reformatted insect food product comprises:

a measured amount of a mixture of at least one nutrient source for a mosquito larvae or pupae formed into a dispensable unit, wherein the at least one nutrient source comprises at least one of bovine liver powder or cricket protein powder, wherein the measured amount of the mixture is encased in a dissolvable capsule that is configured to dissolve in an aquatic environment and release the measured amount of the mixture to the mosquito larvae or pupae present in the aquatic environment; and

distributing the reformatted insect food product to the plurality of insect larvae in the aquatic environment.

18. The method of claim 17, wherein the at least one nutrient source comprises at least one of cricket protein powder, bovine liver powder, or Tetramin®.

19. The method of claim 17 or 18, wherein the mixture comprises substantially 50% bovine liver powder and substantially 50% cricket protein powder.

20. The method of claim 17, further comprising agitating the aquatic environment to disperse the reformatted insect food product throughout the aquatic environment.

21. The method of claim 17, wherein distributing the reformatted insect food product to the plurality of insect larvae in the aquatic environment is performed

using at least one of an auger, a broadcast spreader, a blow feeder, a conveyor belt, or a drum feeder.

22. The method of claim 17, wherein distributing the reformatted insect food product to the plurality of insect larvae in the aquatic environment is performed automatically based on a programmed schedule.