WHAT IS CLAIMED IS:

1. A filtration method comprising:

denaturing proteins in a first slurry, wherein the first slurry is made by saccharifying biomass to produce saccharified biomass, and further made by fermenting the saccharified biomass;

utilizing a first centrifuge to remove a first portion of solids from the first slurry, thereby producing a second slurry; and

utilizing a second centrifuge to remove a second portion of solids from the second slurry, thereby producing a third slurry,

wherein the first slurry, the second slurry and the third slurry have not undergone distillation.

2. The method of claim 1, wherein the first centrifuge is operated at a first G-Force and the second centrifuge is operated at a second, higher G-Force.

3. The method of claim 2, wherein the first G-Force is between about 500 g and about 3000 g.

4. The method of claim 2, wherein the second G-Force is between about 2000 g and about 5000 g.

5. The method of claim 1, wherein the first slurry contains between about 1 weight percent and 40 weight percent solids.

6. The method of claim 1, wherein the second slurry contains between about 1 weight percent and about 10 weight percent solids.

7. The method of claim 1, wherein the second slurry contains less than half the solids as compared to the first slurry.

8. The method of claim 1, wherein the third slurry contains less than about 3 weight percent solids.

9. The method of claim 1, wherein the third slurry contains less than about half the solids as compared to the second slurry.

10. The method of claim 1, wherein the first slurry has a median particle size of greater than 100 μm.

11. The method of claim 1, wherein the second slurry has a median particle size less than about 100 μm.

12. The method of claim 1, wherein the third slurry has a median particle size less than about 10 μm.

13. The method of claim 1, wherein the first portion of solids is washed, thereby producing a first washing fluid, and the first washing fluid is added to the second or third slurry.

14. The method of claim 1, wherein the second portion of solids is washed, thereby producing a second washing fluid, and the second washing fluid is added to the third slurry.

15. The method of claim 1, further comprising utilizing a third centrifuge to remove a third portion of solids from the third slurry.

16. The method of claim 1, wherein the second slurry is produced at an average rate of at least 10 gal/min.

17. The method of claim 16, wherein the second slurry contains less than about 3% solids.

18. The method of claim 1, wherein the method is carried out in a closed system.

19. The method of claim 1, wherein the biomass has been physically treated to reduce its recalcitrance, prior to saccharifying.

20. The method of claim 1 wherein the first centrifuge and the second centrifuge are decanter centrifuges that include systems for cleaning solids that have been separated out of the first slurry and the second slurry.

21. The method of claim 1 further comprising adding a precipitation agent to the first slurry or to the second slurry.

22. The method of claim 1 further comprising subjecting the third slurry to ultrafiltration.

23. The method of claim 1 further comprising subjecting the third slurry to electrodialysis.

24. The method of claim 1 further comprising subjecting the third slurry to simulated moving bed chromatography.