WHAT IS CLAIMED IS:

1. A method comprising:

enzymatically hydrolyzing one or more hydrolysable densified biomass particulates to produce a convertible sugar-containing stream, wherein said densified biomass particulates are produced by:

subjecting a quantity of plant biomass fibers containing lignin and/or hemicellulose to a pretreatment to cause at least a portion of the lignin and/or hemicellulose ~~contained within each fiber~~ to move to an outer surface of said fiber to produce a quantity of pretreated tacky plant biomass fibers; and

densifying the quantity of pretreated tacky plant biomass fibers to produce the one or more hydrolysable densified biomass particulates, wherein said biomass fibers is densified without using added binder.

2. The method of claim 1 wherein the solids loading is ~~between~~ from about 12% ~~and~~ to about 35%, or from about 12% to about 20%, or from about 18% to about 24%.

~~3. The method of claim 1 wherein the solids loading is between about 12% and about 20%.~~

~~4. The method of claim 1 wherein the hydrolysis is an enzymatic hydrolysis.~~

~~5~~ 3. The method of ~~any one of claims 1 to 4~~ claim 1 wherein said biomass fibers are corn stover fibers, switchgrass fibers, wood fibers, prairie cord grass fibers, or combinations thereof.

~~6~~ 4. The method of claim ~~5~~ 1 wherein the pretreatment and the densifying step are performed as an integrated process at a single location.

~~7~~ 5. The method of claim ~~5~~ 1 wherein the pretreatment is an ammonia pretreatment or a sodium hydroxide pretreatment.

~~8~~ 6. The method of claim ~~7~~ 5 wherein the ammonia pretreatment is a liquid ammonia fiber expansion (AFEX) pretreatment or a gaseous AFEX pretreatment.

~~9~~ 7. The method of claim ~~8~~ 5 wherein the method further comprises adding water and/or steam during the pretreatment.

~~10~~ 8. The method of claim ~~5~~ 1 wherein the convertible sugar-containing stream is fermented to produce a bioproduct.

~~11. The method of claim 10 wherein fermentation rates are improved as compared to fermentation rates achieved using non-densified plant biomass.~~

~~12~~ 9. The method of claim ~~10~~ 8 wherein the bioproduct is a biofuel.

~~13~~ 10. A product produced according to the method of claim 1.

~~14~~ 11. A system comprising:

a hydrolyzing facility for enzymatically hydrolyzing one or more hydrolysable densified biomass particulates to produce a convertible sugar-containing stream, wherein said densified biomass particulates are produced by:

subjecting a quantity of plant biomass fibers to a pretreatment to cause at least a portion of lignin and/or hemicellulose contained within each fiber to move to an outer surface of said fiber to produce a quantity of pretreated tacky plant biomass fibers; and

densifying the quantity of pretreated tacky plant biomass fibers to produce the one or more hydrolysable densified biomass particulates wherein said biomass fibers is densified without using added binder.

~~15~~ 12. The system of claim ~~14~~ 11 wherein the hydrolyzing facility is part of a bioproduct production facility, and the convertible sugar-containing stream is fermented in the bioproduct production facility to produce a bioproduct.

~~16~~ 13. The system of claim ~~15~~ 12 wherein the bioproduct production facility is an ethanol production facility and/or said biomass fibers are corn stover fibers.

~~17. The system of claim 16 wherein said biomass fibers are corn stover fibers.~~

~~18. The system of claim 14 wherein the solids loading is between about 12% and about 35%.~~

~~19. The system of claim 14 wherein the solids loading is between about 12% and about 20%.~~

~~20~~ 14. The system of any one of claims ~~14 to 19~~ claim 13 further comprising:

a pretreatment facility for the subjecting step; and

a densifying facility for the densifying step.

~~21~~ 15. The system of claim ~~20~~ 14 wherein the pretreatment is an ammonia pretreatment or a sodium hydroxide pretreatment.

~~22~~ 16. The system of claim ~~21~~ 15 wherein the ammonia pretreatment is a liquid ammonia fiber expansion (AFEX) pretreatment or a gaseous pretreatment.

~~23~~ 17. The system of claim ~~20~~ 14 wherein the pretreatment facility and densifying facility are co-located.

18. (New) The method of claim 1 wherein the convertible sugar-containing stream is produced from said densified biomass particulates at a faster rate as compared to a sugar-containing stream produced using non-densified biomass.

19. (New) The product of claim 10 wherein the fermentable sugar-containing stream contains glucose, xylose, mannose, arabinose, or a combination thereof.

20. (New) A method comprising:

subjecting a quantity of plant biomass fibers containing lignin and/or hemicellulose to a pretreatment to cause at least a portion of lignin and/or hemicellulose to move to an outer surface of said fiber to produce a quantity of pretreated tacky plant biomass fibers;

densifying the quantity of pretreated tacky plant biomass fibers to produce the one or more hydrolysable densified biomass particulates wherein said biomass fibers is densified without using added binder; and

enzymatically hydrolyzing one or more hydrolysable densified biomass particulates at to produce a convertible sugar-containing stream, wherein, the subjecting, densifying and enzymatically hydrolyzing steps are performed as an integrated process at a single location.

21. (New) A method comprising:

providing a hydrolysable densified biomass particulate or a plurality thereof, the hydrolysable densified biomass particulate comprising a plurality of plant biomass fibers containing lignin and/or hemicellulose at an outer surface of the fibers, wherein the hydrolysable densified biomass particulate is in a compressed particulate form and is free from added binder; and

hydrolyzing the hydrolysable densified biomass particulate or plurality thereof to produce a convertible sugar-containing stream.