What is claimed:

1. A method for the preparation of a botanical fraction from plant cell juice derived from fresh plant biomass, wherein the process comprises subjecting said plant cell juice to an electromagnetic field at a frequency of greater than 2.45 GHz for a time effective to destabilize the plant cell juice yielding a coagulated cell juice mixture comprising a coagulated membrane fraction, and separating said coagulated membrane fraction from said coagulated cell juice mixture in order to yield a bioactive fraction comprising a cytoplasm/cytosole fraction that is substantially-free from said membrane fraction.

2. The method of claim 1, wherein the temperature of said cell juice is maintained at or below 40°C.

3. The method according to claim 1, wherein said plant cell juice is destabilized by subjecting said plant cell juice to an electromagnetic field at a frequency of from greater than 2.45 GHz to about 7.0 GHz.

4. The method according to claim 3, wherein said electromagnetic field is generated by a high power magnetron.

5. The method according to claim 1, wherein said separation of said coagulated membrane fraction is carried out by filtration or centrifugation.

6. The method according to claim 3, wherein the frequency of said electromagnetic field is from greater than 2.5 GHz to about 7.0 GHz.

7. The method according to claim 6, wherein the frequency of said electromagnetic field is from greater than 3.0 GHz to about 6.0 GHz.

8. The method of claim 7, wherein the temperature of said cell juice is maintained at or below 30°C.

9. The method of claim 8, wherein the temperature of said cell juice is maintained at or below 25°C.

10. The method according to claim 1, wherein said cytoplasm/cytosole fraction is stabilized by incubating said cytoplasm/cytosole fraction in a mixture of at least one preservative and at least one antioxidant to yield the stable bioactive botanical cosmetic composition.

11. The method according to claim 10, wherein said preservative is selected from the group consisting of potassium sorbate, sodium benzoate, sodium methyl paraben, and citric acid.

12. The method according to claim 10, wherein said antioxidant is sodium metabisulfite.

13. The method according to claim 1, wherein said fresh plant biomass is derived from a plant family selected from *Laminariaceae, Cladophoraceae, Fabeaceae, Teaceae, Asteraceae,, Lamiaceae, Liliaceae*, *Poaceae* and *Moraceae.*

14. The method of claim 1 wherein said fresh plant biomass is selected from the group consisting of *Macrocystis porifera, Chaetomorpha, Medicago sativa, Trifolium pratense, Glycine max, Camellia sinensis, Calendula officinalis, Tanacetum parthenium, Chamomilla recutita , Lavandula angustifolia, Salvia officinalis, Nelumbo nucifera, Lilium bulbiferum, Avena sativa* and *Hordeum vulgare*

15. The method of claim 1 wherein said bioactive fraction comprises coagulated membrane fraction.

16. A stable bioactive botanical cosmetic composition comprising an effective amount of the cytoplasm/cytosole fraction that is substantially-free from membrane fraction of claim 1.

17. A stable bioactive botanical cosmetic composition comprising an effective amount of the membrane fraction of claim 1.

18. The method of claim 1 wherein said method is substantially free of added extraneous solvent, substantially free of added extraneous water, or substantially free of both added extraneous solvent and added extraneous water

19. The method of claim 18 wherein said method is free of added extraneous solvent and added water.

20. The method according to claim 6, wherein the frequency of said electromagnetic field is from greater than 3.5 GHz to about 6.0 GHz.

CLAIMS

1. A method for the preparation of a botanical fraction from plant cell juice derived from fresh plant biomass, wherein the process comprises subjecting said plant cell juice to an electromagnetic field at a frequency of greater than 3 GHz for a time effective to destabilize the plant cell juice yielding a coagulated cell juice mixture comprising a coagulated membrane fraction, and separating said coagulated membrane fraction from said coagulated cell juice mixture in order to yield a bioactive fraction comprising a cytoplasm/cytosole fraction that is substantially-free from said membrane fraction, wherein the temperature of said cell juice is maintained at or below 40°C.

2. The method according to claim 1, wherein said plant cell juice is destabilized by subjecting said plant cell juice to an electromagnetic field at a frequency of from greater than 3 GHz to about 7.0 GHz.

3. The method according to claim 2, wherein said electromagnetic field is generated by a high power magnetron.

4. The method according to claim 1, wherein said separation of said coagulated membrane fraction is carried out by filtration or centrifugation.

5. The method according to claim 2, wherein the frequency of said electromagnetic field is from greater than 3.0 GHz to about 6.0 GHz.

6. The method of claim 5, wherein the temperature of said cell juice is maintained at or below 30°C.

7. The method of claim 6, wherein the temperature of said cell juice is maintained at or below 25°C.

8. The method according to claim 1, wherein said cytoplasm/cytosole fraction is stabilized by incubating said cytoplasm/cytosole fraction in a mixture of at least one preservative and at least one antioxidant to yield the stable bioactive botanical cosmetic composition.

9. The method according to claim 8, wherein said preservative is selected from the group consisting of potassium sorbate, sodium benzoate, sodium methyl paraben, and citric acid.

10. The method according to claim 8, wherein said antioxidant is sodium metabisulfite.

11. The method according to claim 1, wherein said fresh plant biomass is derived from a plant family selected from *Laminariaceae, Cladophoraceae, Fabeaceae, Teaceae, Asteraceae,, Lamiaceae, Liliaceae*, *Poaceae* and *Moraceae.*

12. The method of claim 1 wherein said fresh plant biomass is selected from the group consisting of *Macrocystis porifera, Chaetomorpha, Medicago sativa, Trifolium pratense, Glycine max, Camellia sinensis, Calendula officinalis, Tanacetum parthenium, Chamomilla recutita , Lavandula angustifolia, Salvia officinalis, Nelumbo nucifera, Lilium bulbiferum, Avena sativa* and *Hordeum vulgare*

13. The method of claim 1 wherein said bioactive fraction comprises coagulated membrane fraction.

14. A stable bioactive botanical cosmetic composition comprising an effective amount of the cytoplasm/cytosole fraction that is substantially-free from membrane fraction of claim 1.

15. A stable bioactive botanical cosmetic composition comprising an effective amount of the membrane fraction of claim 1.

16. The method of claim 1 wherein said method is substantially free of added extraneous solvent, substantially free of added extraneous water, or substantially free of both added extraneous solvent and added extraneous water

17. The method of claim 16 wherein said method is free of added extraneous solvent and added water.

18. The method according to claim 5, wherein the frequency of said electromagnetic field is from greater than 3.5 GHz to about 6.0 GHz.