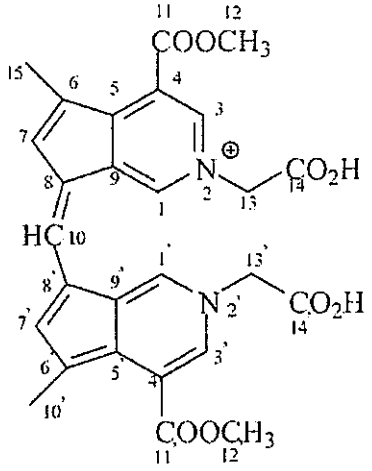
CLAIMS

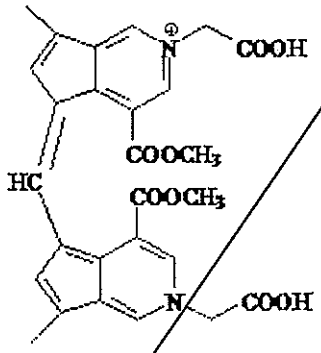
1. An isolated colorant compound of the formula 3A:

Formula 3A



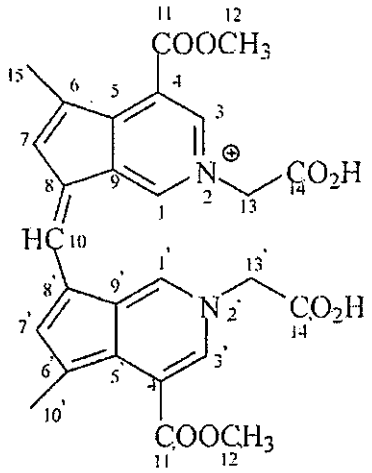
2. An isolated colorant compound of formula 3B:

Formula 3B



3. A method of isolating the compound of formula 3A:

Formula 3A



the method comprising:

A. Isolating genipin from *Genipa Americana* juice;

B. Reacting glycine with said genipin to obtain a material soluble in methanol;

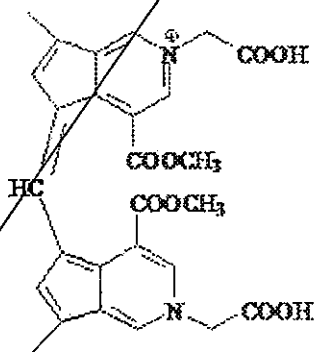
C. Separating by chromatography the material soluble in methanol into S1, S2, S3, and S4 fractions;

D. Separating again by chromatography the S3 fraction into S31, S32, S33 and S34 fractions; and

E. Isolating by reverse phase chromatography from the S33 fraction the compound of formula I.

4. A method of isolating the compound of Formula 3B:

Formula 3B



the method comprising:

A. Isolating genipin from *Genipa Americana* juice;

B. Reacting glycine with said genipin to obtain a material soluble in methanol;

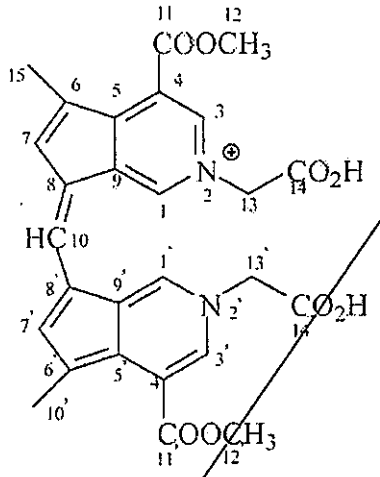
C. Separating by chromatography the material soluble in methanol into S1, S2, S3, and S4 fractions;

D. Separating again by chromatography the S3 fraction into S31, S32, S33 and S34 fractions; and

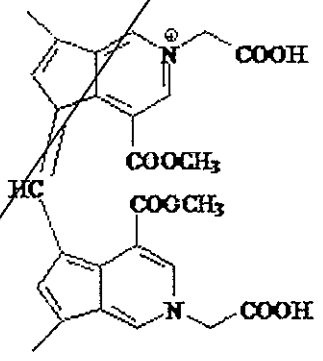
E. Isolating by reverse phase chromatography from the S33 fraction the compound of formula I.

5. An isolated colorant compound of formula 3A or formula 3B:

Formula 3A



Formula 3B



an isomer thereof, or a combination thereof.

6. A colorant composition comprising the colorant compound of any of claims 1, 2 or 5.

7. The colorant composition of claim 6, further comprising a carrier, a filler, or enhancing agent.

8. A method of imparting blue color to a substance comprising contacting the substance with an effective amount of the colorant composition of claim 6.

9. The method of claim 8, wherein the substance is selected from the group consisting of a food item, a textile, and a cosmetic product.

10. The method of claim 9, wherein the food item is a solid, a semisolid food item, or a liquid food item.

11. A food product comprising a food item and the colorant composition of claim 6.

12. The food product of claim 11, wherein the food item is a solid food item or a liquid food item.

13. The food product of claim 12, wherein the liquid food item is a beverage.

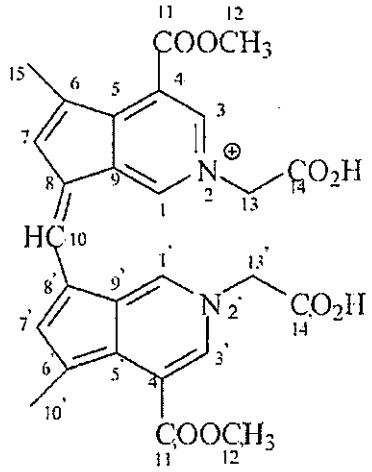
14. The food product of claim 13, wherein the liquid food item is a carbonated beverage.

15. A textile comprising a colorant composition of claim 6.

16. A cosmetic comprising a colorant composition of claim 6.

17. A method of preparing a compound of the formula 3A:

Formula 3A



comprising:

a. reacting genipin with gycline for a time and temperature sufficient to produce a mixture comprising compound 3A; and

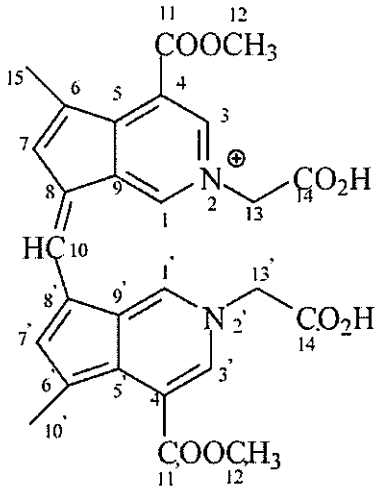
b. isolating the compound of the formula 3A from the mixture.

18. The method of claim 17, wherein the genipin is from *Genipa Americana*.

CLAIMS

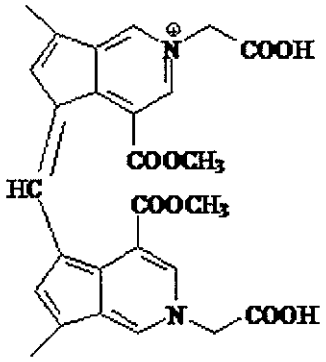
1. An isolated colorant compound of the formula 3A:

Formula 3A



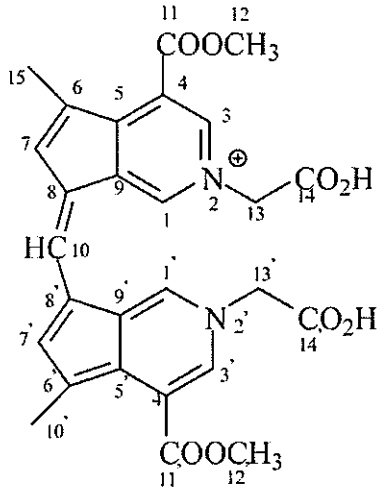
2. An isolated colorant compound of formula 3B:

Formula 3B



3. A method of isolating the compound of formula 3A:

Formula 3A



the method comprising:

A. Isolating genipin from *Genipa Americana* juice;

B. Reacting glycine with said genipin to obtain a material soluble in methanol;

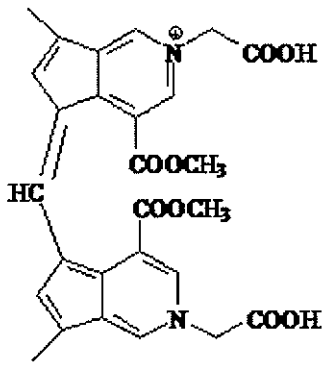
C. Separating by chromatography the material soluble in methanol into S1, S2, S3, and S4 fractions;

D. Separating again by chromatography the S3 fraction into S31, S32, S33 and S34 fractions; and

E. Isolating by reverse phase chromatography from the S33 fraction the compound of formula 3A.

4. A method of isolating the compound of Formula 3B:

Formula 3B



the method comprising:

A. Isolating genipin from *Genipa Americana* juice;

B. Reacting glycine with said genipin to obtain a material soluble in methanol;

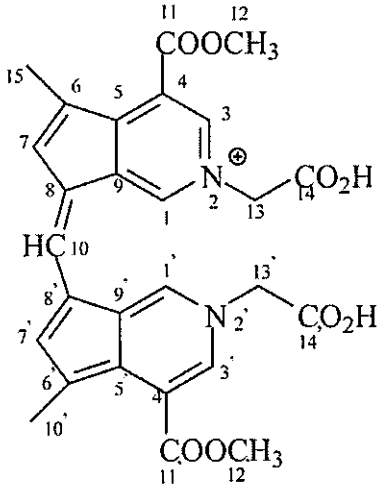
C. Separating by chromatography the material soluble in methanol into S1, S2, S3, and S4 fractions;

D. Separating again by chromatography the S3 fraction into S31, S32, S33 and S34 fractions; and

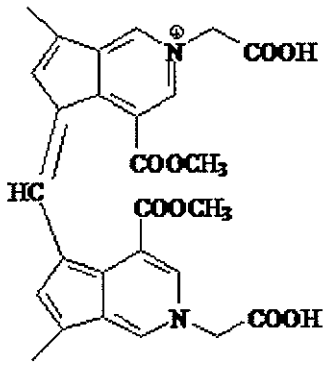
E. Isolating by reverse phase chromatography from the S33 fraction the compound of formula 3B.

5. An isolated colorant compound of formula 3A or formula 3B:

Formula 3A

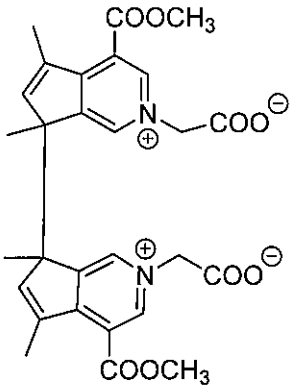


Formula 3B

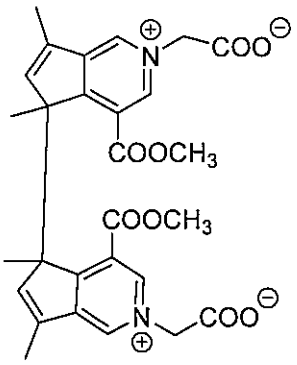


an isomer thereof, or a combination thereof.

6. An isolated colorant compound having a formula 1A, formula 1B, or a mixture thereof:



1A



1B

7. The colorant compound of claim 6 having the formula 1A.

8. The colorant compound of claim 6 having the formula 1B.

9. The colorant compound of any of claims 1, 2, or 5-8, wherein the compound is isolated from a reaction of glycine with genipin.

10. The colorant compound of claim 9, wherein the genipin is a purified genipin.

11. The colorant compound of claim 10, wherein the purified genipin is obtained from *Genipa Americana* juice.

12. The colorant compound of claim 11, wherein the compound is isolated using a method comprising chromatography.

13. A colorant composition comprising the colorant compound of any of claims 1, 2 or 5-12.

14. The colorant composition of claim 13, further comprising a carrier, a filler, or enhancing agent.

15. A method of imparting blue color to a substance comprising contacting the substance with an effective amount of the colorant composition of claim 13 or 14.

16. The method of claim 15, wherein the substance is selected from the group consisting of a food item, a textile, and a cosmetic product.

17. The method of claim 16, wherein the food item is a solid, a semisolid food item, or a liquid food item.

18. A food product comprising a food item and the colorant composition of claim 13 or 14.

19. The food product of claim 18, wherein the food item is a solid food item or a liquid food item.

20. The food product of claim 19, wherein the liquid food item is a beverage.

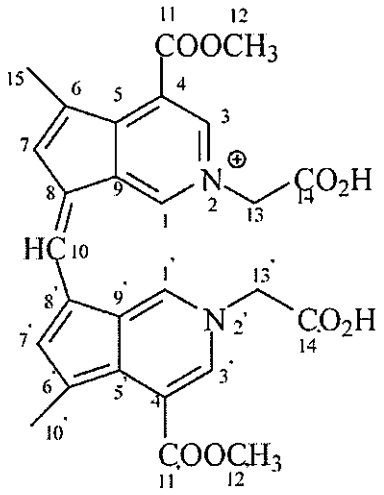
21. The food product of claim 20, wherein the liquid food item is a carbonated beverage.

22. A textile comprising a colorant composition of claim 13 or 14.

23. A cosmetic comprising a colorant composition of claim 13 or 14.

24. A method of preparing a compound of the formula 3A:

Formula 3A



comprising:

a. reacting genipin with gycline for a time and temperature sufficient to produce a mixture comprising compound 3A; and

b. isolating the compound of the formula 3A from the mixture.

25. The method of claim 24, wherein the genipin is from *Genipa Americana*.

26. A colorant compound of formula 3A, 3B, or a mixture thereof, isolated by a method comprising:

A. Isolating genipin from *Genipa Americana* juice;

B. Reacting glycine with said genipin to obtain a material soluble in methanol;

C. Separating by chromatography the material soluble in methanol into S1, S2, S3, and S4 fractions;

D. Separating again by chromatography the S3 fraction into S31, S32, S33 and S34 fractions; and

E. Isolating by reverse phase chromatography from the S33 fraction the compound of formula 3A, 3B, or a mixture thereof.