CLAIMS

1. A synergistic composition comprising an extract of plant of genus Galeopsis and a compound promoting autophagy selected from R-N^1-spermidine or a salt thereof, wherein R is hydrogen or methyl, biotin and mixtures thereof.

2. The synergistic composition of claim 1, wherein the extract of plant of genus Galeopsis is selected from the species of Galeopsis segetum and Galeopsis tetrahit and mixtures thereof.

3. The synergistic composition of claim 2, wherein the extract of plant of genus Galeopsis is a dry extract obtainable by the process comprising the following steps:

- grinding at least one part of the plant of genus Galeopsis;
- extracting with a solvent, preferably a physiologically acceptable solvent;
- filtering the extract;
- purifying the filtered extract, preferably by eluting in a column with a solvent;
- drying the purified extract;
- grinding the dried purified extract; and
- optionally adding excipients.

4. The synergistic composition of claim 3, wherein the excipients comprise maltodextrin and/or colloidal anhydrous silica gel.

5. The synergistic composition of anyone of claims 1-4, wherein Spermidine is present in the composition in the form of trihydrochloride.

6. A topical formulation comprising the synergistic composition according to anyone of claims 1-5 and at least one excipient suitable for topical administration.

7. The topical formulation according to claim 6, wherein the amount of the extract of plant of genus Galeopsis is in the range of 0.0003% to 0.01% by weight with respect to the total weight of the composition.

8. The topical formulation according to claim 6 or claim 7, wherein the amount of biotin is in the range of 0.0006% to 0.075% by weight with respect to the total weight of the composition.

9. The topical formulation according to anyone of claims 6-8, wherein the composition comprises R-N^1-spermidine or a salt thereof, wherein R is methyl or hydrogen, in the range of 0.0005-0.1% by weight with respect to the total weight of the composition.

10. The topical formulation according to anyone of claims 6-9, wherein the formulation is in a form selected from the group consisting of a shampoo, a gel, a conditioner, a lotion, a balm, an emulsion, a foam, a makeup and a cream.

11. An oral formulation comprising the synergistic composition according to anyone of claims 1-5 and at least one excipient suitable for oral administration.

12. The oral formulation of claim 11, wherein the amount of the dry extract of the plant of genus Galeopsis in the oral formulation is in the range of 0.1 mg to 20 mg per single dose.

13. The oral formulation of claim 11 or 12, wherein the amount of biotin in the oral formulation is in the range of 0.03 mg to 0.08 mg per single dose.

14. The oral formulation of claim 11 or 12, wherein the composition comprises R-N^1-spermidine or a salt thereof, wherein R is methyl or hydrogen, in the range of 0.3 mg to 0.8 mg per single dose.

15. The oral formulation according to anyone of claims 11-14, wherein the formulation is a solid formulation selected from the group consisting of a tablet, a capsule, powders, granules and a pill.

16. A cosmetic use of the synergistic composition according to anyone of claims 1-5 or a topical formulation according to anyone of claims 6-10 or an oral formulation according to anyone of claims 11-15 in promoting hair growth and/or preventing hair loss.

17. A synergistic composition according to anyone of claims 1-5 or a topical formulation according to anyone of claims 6-10 or an oral formulation according to anyone of claims 11-15 for use in the treatment of alopecia androgenetica or defluvium.

18. A synergistic composition according to anyone of claims 1-5 for use as a promoter of autophagy in the treatment of a disease modulated by autophagy.

19. The synergistic composition for use according to claim 18 wherein the diseases modulated by autophagy are selected from the group consisting of neurodegeneration, cancer, Crohn's disease and skin diseases.

20. Use of the synergistic composition according to any one of claims 1-5 or the topical formulation according to any one of claims 6-10 or the oral formulation according to any one of claims 11-15 in the manufacture of a medicament for the treatment of alopecia androgenetica or defluvium.

21. Use of the synergistic composition according to any one of claims 1-5 in the manufacture of a medicament, the medicament being a promoter of autophagy, for the treatment of a disease modulated by autophagy.

22. The use according to claim 21, wherein the diseases modulated by autophagy are selected from the group consisting of neurodegeneration, cancer, Crohn's disease and skin diseases.