CLAIMS

1. A microbiological process for the production of bee bread comprising a step a) of inoculation of pollen in grains with a starter lactic bacterium and a step b) of fermentation of the pollen, said process being characterized by the fact that the starter lactic bacterium inoculated is a lactic bacterium of the species *Lactobacillus kunkeei*., selected from the strains *Lactobacillus kunkeei* PF12, PF15 and PL13 and mixtures thereof.

2. The process according to Claim 1, comprising a preliminary treatment of the pollen grains for degrading the outer coating layer and making the grain content available for the fermentative activity of the lactobacilli inoculated in step a).

3. The process according to anyone of Claims 1 or 2, comprising the inoculation of a yeast which degrades or metabolizes the coating pectinic component of the pollen grain, in a preliminary step or in step a).

4. The process according to Claim 3, wherein said yeast which degrades or metabolizes the coating pectinic component of the of the pollen grain belongs to the *Wickerhamomyces anomalus* species and is the *Hanseniaspora uvarum* AN8Y27B strain.

5. The process according to anyone of Claims 1-4, comprising a further step c) of abatement of the microbial charge after the fermentation step.

6. The process according to anyone of Claims 1-5, comprising a further step of drying, preferably of freeze-drying or of spray-drying.

7. A bee bread or fermented pollen obtained by the process according to anyone of Claims 1-6.

8. A composition comprising bee bread or fermented pollen according to Claim 7 and an edible carrier.

9. The bee bread according to Claim 7 or the composition according to Claim 8 for use in the treatment of intestinal diseases.

10. Use of the bee bread according to Claim 7 or the composition according to claim 8 for the cosmetic treatment of cutaneous aging.

11. The bee bread according to Claim 7 or the composition according to Claim 8 for use in the treatment of skin diseases characterized by a non-physiological production of free radicals.

12. The bee bread according to Claim 7 or the composition according to Claim 8 for

use in the treatment of inflammatory diseases.