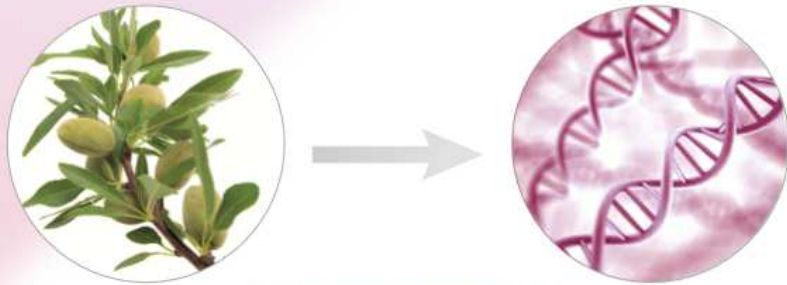


# GENETIC IDENTITY OF PLANT OF INTEREST IN COSMETICS



**CCTCATGATTTTGAA**

Genetic sequence (linkage order of the nucleotides)

=  
DNA signature of plant of interest

## CHECKING OF THE AUTHENTICITY AND ORIGIN OF PLANTS

### ON RAW PLANT MATERIALS:

Dried plants, flowers, leaves, seeds, plant extracts, etc.:



**CCTCATGATTTTGAA**

## TRACEABILITY

### ON TRANSFORMED AND FINAL PRODUCTS:

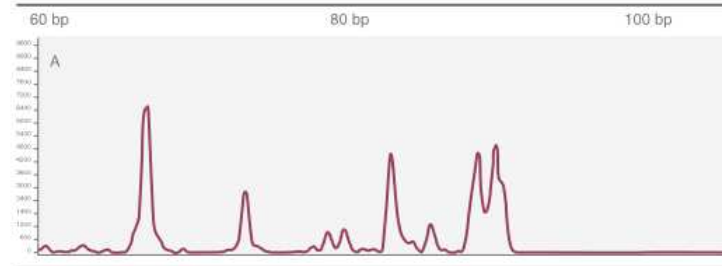
Ingredients or cosmetics (creams, emulsions, oils, etc.)



## TECHNOLOGY BEING USED: PCR/SEQUENCING APPROACH

▲ DNA extraction and PCR amplification with patented molecular tools\*: chloroplastic marker and universal primers or other markers appropriate for diagnosis.  
\*From Joseph Fourier University

▲ PCR products analysis.



▲ Conventional sequencing and high performance sequencing.

▲ Bio-informatical analysis of obtained genetic sequences.

```

sel=0          1      Seq : 1      Pos : 1|1      [HWI-ST132:570;sample=RM03B2a;count=256]
HWI-ST132:570 ; sample  TCCTATTTTTCGAAAACAAACAAAGGTTTCATAAAGACAGAATAAGAATACAAAAG
HWI-HK248:834 ; sample  TTTTCGAAAACAAACAAAGGTTTCATAAAGACAGAATAAGAATACAAAAG
    
```

