



PAPER MULBERRY

RESEARCH SUMMARY

STUDY 1

Paper Mulberry is the most active tyrosinase inhibitor!

“Melanogenesis Inhibitor from Paper Mulberry”

Dong, J. et al, Cosmetics and Toiletries, 1997, 112; 59-62

Key Points of Study

- A comparison of the tyrosinase inhibition of paper mulberry with kojic acid and HQ reveal that the IC₅₀ (ie, the concentration causing 50% inhibition of the activity of tyrosinase) is 0.396%, compared with 5.5% for HQ and 10.0% for kojic acid.
- The authors also performed a patch test using 1% paper mulberry extract and found no significant irritation at either 24 hours or 28 hours.

STUDY 2

Paper Mulberry is stronger than hydroquinone!

“The Depigmentation effect of a new material extracted from paper mulberry and its comparison by three colorimetric instruments”

Ha, J.H, Jo, N.S, Lee, H.K, ICCSF, Korea

Key Points of Study

- Paper Mulberry was a more effective tyrosinase inhibitor than hydroquinone, ascorbic acid and kojic acid.
- Paper Mulberry also showed anti-erythema and free radical scavenging properties and was shown to be non-irritating.
- The authors said that an extract of Paper Mulberry containing 5.0% of this active compound would be sufficient to show a fairly potent lightening effect when used at a concentration as low as 0.1 -1.0% in the final product.