

Useful Material Development of *Bombycis corpus*101A (*Bombyx mori* L.) Having Enhancement of the Neurite Outgrowth

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This study was carried out to investigate active constituents of *Bombycis corpus* 101A on the neurite outgrowth from PC 12 cells led to isolate three new and a known sphingolipids from the n-hexane soluble portion and five amines from the butanol soluble portion of its methanol extract. On the basis of spectroscopic data, their structures have been elucidated as (4E, 6E, 2S, 3R)-2-N-eicosanoyl-4,6 tetradecasphingadienine, (4E, 2S, 3R)-2-N-eicosanoyl-4-tetradecasphingenine, (4E, 6E, 2S, 3R)-2-N-docosanoyl-4,6-tetradecasphingadienine, (4E, 6E, 2S, 3R)-2-N-docosanoyl-4,6-tetradecasphingadienine, (4E, 2S, 3R)-2-N-octadecanoyl-4-tetradecasphingenine, 1,7-dimethyl-xanthine, uracil, urea, betaine and tyrosine, respectively. The neurite outgrowth activities of these compounds were examined in PC 12 cells by measuring the length of neurites. These compounds promoted neurite outgrowth in PC12 cells significantly.