

Title	Nutritional effect of some cholesterols and cholestadienols on the silkworm bombyx mori
Sub Title	
Author	川上, さをり(Kawakami, Saori) 森崎, 益雄(Morisaki, Masuo) 池川, 信夫(Ikekawa, Nobuo)
Publisher	共立薬科大学
Publication year	1984
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.29 (1984.) ,p.40- 40
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000029-0040

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Nutritional Effect of Some Cholestenols and Cholestadienols on the Silkworm *Bombyx mori**

Saori KAWAKAMI, Masuo MORISAKI and Nobuo IKEKAWA**

川上さをり, 森崎益雄, 池川信夫**

Several cholesterols and cholestadienols were tested for ability to support the growth of the silkworm, *Bombyx mori*. 5 α -Cholest-6-en-3 β -ol completely fulfilled the insect sterol requirement, whereas 5 α -cholest-8(9)-en-3 β -ol and (20Z)-5,20(22)-cholestadien-3 β -ol were unable to sustain larval growth at all. The other sterols examined were partially effective as nutrients.

Table I Effect of Cholestenols and Cholestadienols on the Growth
and Development of the Silkworm *Bombyx mori*

Compound	Number of larvae in the indicated instar			Average weight (mg)
	1st	2nd	3rd	
5-Cholesten-3 β -ol	0	1	39	46
5 α -Cholest-6-en-3 β -ol	0	9	31	37
5 α -Cholest-8(9)-en-3 β -ol	0	3	0	4
5 α -Cholest-8(14)-en-3 β -ol	0	38	2	24
5 α -Cholest-9(11)-en-3 β -ol	3	5	0	4
(20E)-5 α -Cholest-20(22)-3 β -ol	0	22	18	23
5 α -Cholest-7,9(11)-dien-3 β -ol	0	34	0	15
5 α -Cholesta-7,14-dien-3 β -ol	0	40	0	19
5 α -Cholesta-8,14-dien-3 β -ol	0	0	0	0
20E)-5,20(22)-Cholestadien-3 β -ol	5	33	0	18
(20Z)-5,20(22)-Cholestadien-3 β -ol	5	0	0	3
(22E)-5,22-Cholestadien-3 β -ol	0	35	4	32
(22Z)-5,22-Cholestadien-3 β -ol	2	33	0	12
5,23-Cholestadien-3 β -ol	0	39	0	22
5,25-Cholestadien-3 β -ol	0	26	12	22

The number and average weight of surviving larvae on day 15, starting with 4 newly hatched larvae are shown.

* 本報告は *Chem. Pharm. Bull.*, 32, 1608 (1984) に発表

** 東京工業大学理学部