

1-Year Oral Toxicity Study of Chinese bayberry extract in F344/DuCrj Rats

(Received March 8, 2001)

(Accepted May 7, 2001)

Hiroko Yoshinoa ^{a,b}, Mayumi Kawabea ^{a,b}, Seiko Tamanoa ^{a,b}, Akihiro Hagiwaraa ^{a,b},
Tsutomu Washino ^c, Mikio Nakamura ^c, Katsumi Imaida ^b

a) Daiyu-kai Institute of Medical Science

b) First Department of Pathology, Nagoya City University Medical School

c) San-Ei Gen F.F.I., Inc.

Keywords: Chinese bayberry extract, 1-year oral toxicity study, F344 rats

Abstract

The present report concerns results of a 1-year oral toxicity study of Chinese bayberry extract, one active component of which is myricitrin, a flavonoid.

F344 rats (20rats/group both sexes) were given diet containing Chinese bayberry extract at doses of 0, 0.5, 1.5 or 5.0%. Decrease in monocytes on differential counts of WBCs and increase of reticulocytes were observed in the 1.5 and 5.0% male groups. Significant decrease in relative lung weights was apparent in the 0.5, 1.5 and 5.0% males. However, these changes were considered incidental effects. No treatment related effects were noted regarding clinical observation, body weights, food and water consumption, ophthalmologic findings, clinical chemistry and pathology.

In conclusion, 1 year dietary treatment with Chinese bayberry extract at levels up to 5.0% demonstrated no toxicologically significant effects in either male or female rats. It was thus inferred that the no-observed adverse effect level (NOAEL) was up to 5.0% in both sexes.