

Bamboo Leaf Extract and Bioactive Compounds Contributing to Human Health and Longevity

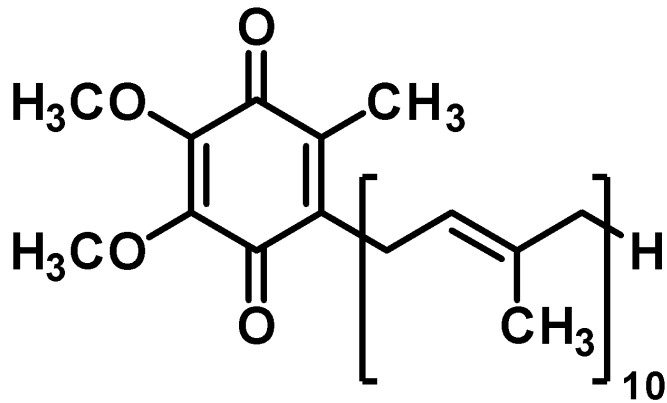
Kimura Ikuko¹ and Kagawa Syota²

¹Toyama College, Toyama, Japan

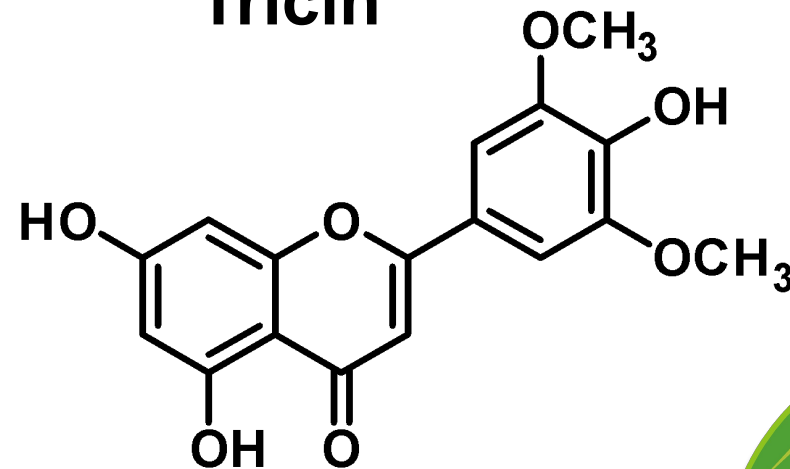
²Daiichi University of Pharmacy, Fukuoka, Japan

Chemical Structural Formula of Compounds Contained in Bamboo Leaf Extract

**Oxidized Coenzyme Q₁₀
(Ubiquinone)**



Tricin



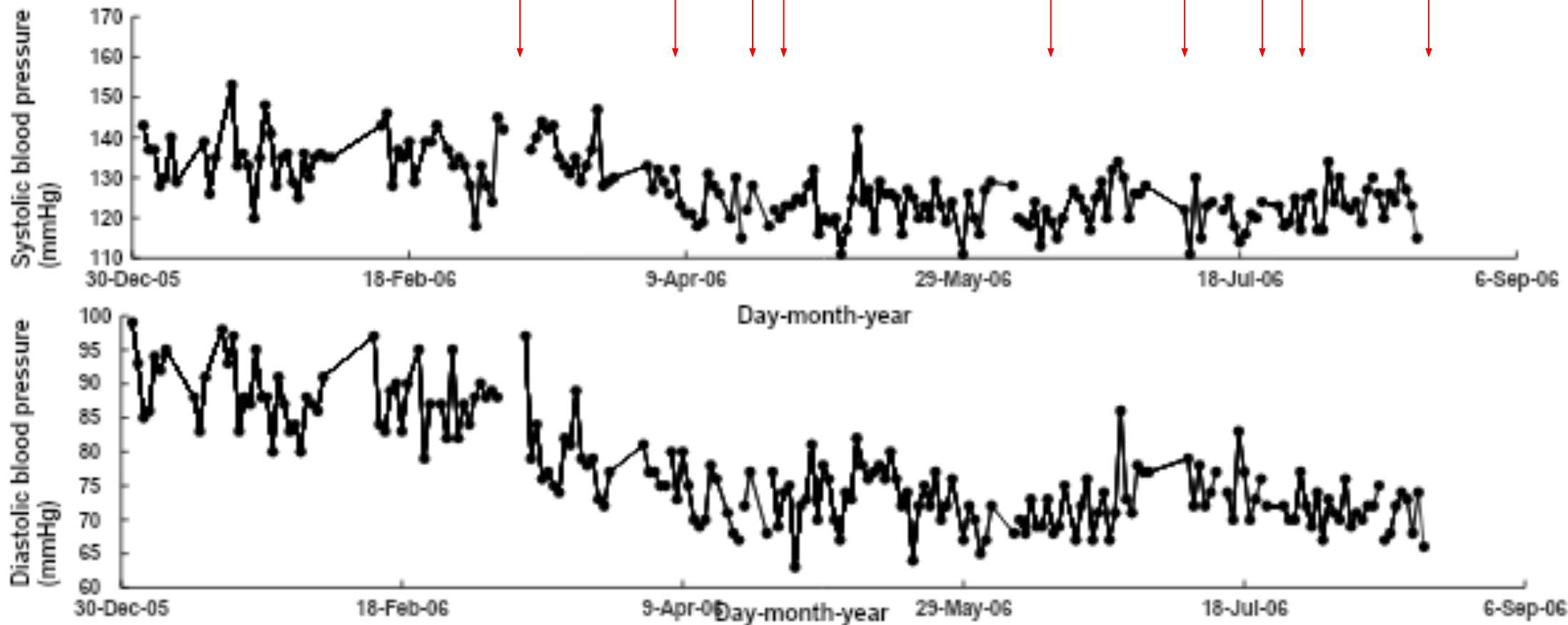
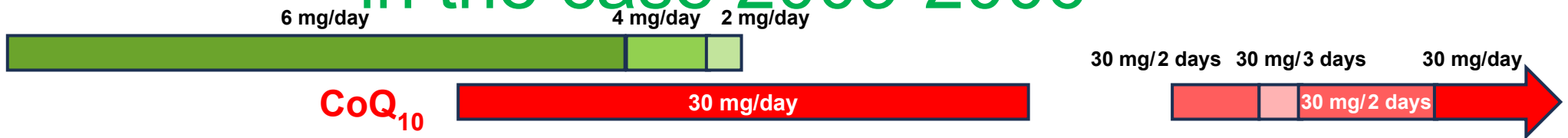
**Arabinoxylan oligosaccharide
Lignin-carbohydrate complex**



Bamboo leaves

The anti-hypertensive effect of CoQ₁₀ in the case 2005-2006

Candesartan



continued
in the case
2023

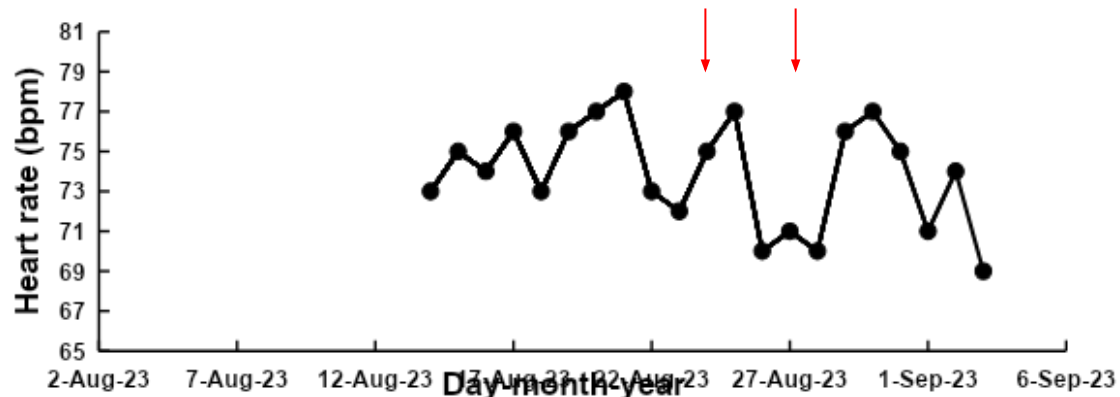
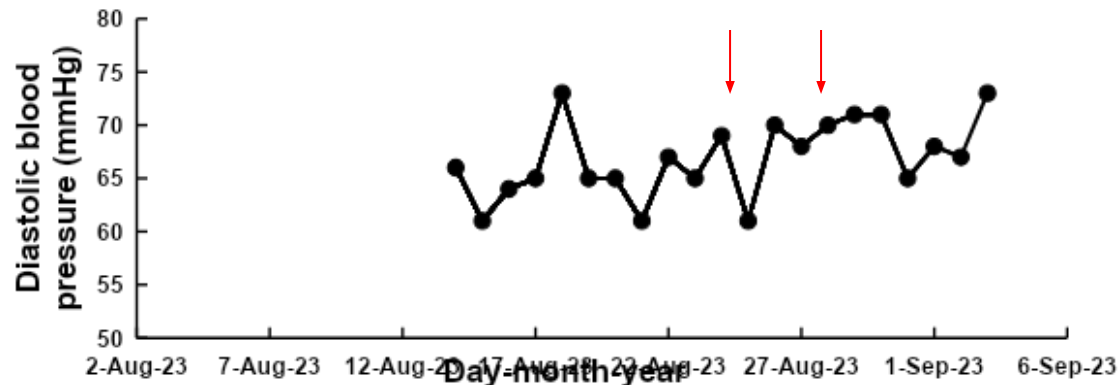
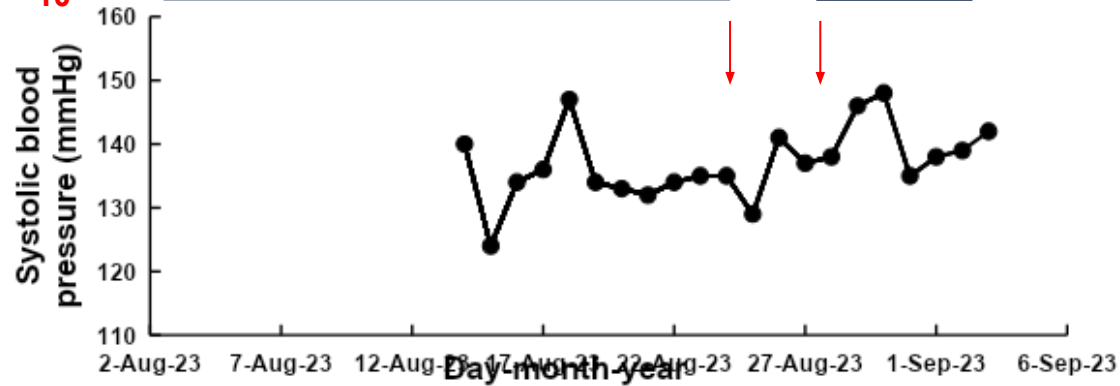
Nifedipine

CoQ₁₀

20 mg/day

30 mg/day

30 mg/day



Synergistic
effects of CoQ₁₀
and nifedipine
on blood
pressure

Antibacterial effects of bamboo leaf-formulation

Species	No. of strains	Range of MIC (mg/mL)
<i>Staphylococcus aureus</i>	6	>3.10
<i>Escherichia coli</i>	6	>3.10
<i>Pseudomonas aeruginosa</i>	5	>3.10
<i>Klebsiella pneumoniae</i>	4	>3.10
<i>Klebsiella oxytoca</i>	1	>3.10
<i>Enterobacter cloacae</i>	4	>3.10
<i>Enterobacter aerogenes</i>	1	>3.10
<i>Streptococcus mutans</i>	2	>3.10
<i>Streptococcus mitis</i>	4	>3.10
<hr style="border-top: 1px dashed black;"/>		
<i>Porphyromonas gingivalis</i>	4	0.194-1.55
<i>Fusobacterium nucleatum</i>	4	>3.10
<i>Prevotella intermedia</i>	4	0.194 or >3.10
<i>Veillonella parvula</i>	4	>3.10

List of reasons from 178 pre-symptomatic patients for the selection of bamboo leaf extracts

37: Cold including sore throat

25: Poor circulation

24: Essential hypertension

18: Lower back pain, Stiff shoulder, Rheumatoid

16: Pollen disease, Hives

14: Migraine headache, Meniere's disease

13: Infection including stomatitis and cystitis

12: Cancer

12: Constipation, Intestinal obstruction

11: Fatty liver disease, Hypercholesterolemia,
Hypertriglyceridemia

10: Menopausal disorder

The mechanisms behind the multi-tasking bioactivities of bamboo leaf extract

1. Anti-hypertensive effects targeting oxidative stress

2. Anti-microbial
& Anti-viral



Anti-inflamm
atory



Anti-cancer effects