

CURRICULUM VITAE

Update: 3/7/2025

Shigenori KUMAZAWA, Ph.D.

-**Position:** Professor

-**Laboratory:** Laboratory of Food Analytical Chemistry

-**University:** Department of Food Science and Biotechnology
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Fields of Research Interest

-Food Analytical Chemistry
-Food Functional Science
-Natural Products Chemistry

Education

-**Ph.D.** Agriculture, Nagoya University, 1995
-**M.A.** Agricultural Chemistry, Nagoya University, 1988
-**B.S.** Agricultural Chemistry, Nagoya University, 1986

Experience

-University of Shizuoka, Professor, 2010-
-University of Shizuoka, Associate Professor, 2004-2010
-University of Shizuoka, Research Assistant Professor, 1997-2003
-Research Scientist at Mitsubishi Chemical Cooperation, 1988-1997

Publications

Original papers (2014–)

1. Takahiro Hosoya, Michiyo Kubota, Shigenori Kumazawa: Characterization and antioxidant activity of green tea (*Camellia sinensis*) using ¹H NMR-based metabolomics. *Food Sci. Technol. Res.*, **2024**, 30, 661-668.
2. Kokoro Matsushita, Chihiro Honda, Yoriyuki Nakamura, Shigenori Kumazawa: Comparison of colorimetric methods for total polyphenol contents analysis in green tea extracts. *Biosci. Biotechnol. Biochem.*, **2024**, 88, 798-803.
3. Shigenori Kumazawa, Saori Kurihara, Michiyo Kubota, Hiroshi Muto, Takahiro Hosoya: Anthocyanins and the antioxidant capacities of wild berries that grow in Shizuoka, Japan. *Int. J. Fruit Sci.*, **2024**, 24, 166-173.
4. Chie Watanabe, Aoi Yanagihara, Ryo Miyata, Taichi Mitsui, Chihiro Honda, Daisuke Fujinami, Shigenori Kumazawa: Catechol-*O*-methyltransferase and monoamine oxidase B inhibitory activities of Australian bee pollen. *Biosci. Biotechnol. Biochem.*, **2024**, 88, 665-670.
5. Sayaka Mizuno, Ryo Miyata, Agus Sukito, Muhamad Sahlan, Shigenori Kumazawa: A new chromanone derivative from *Calophyllum inophyllum* resin and its antibacterial activity. *Rec. Nat. Prod.*, **2023**, 17, 1085-1089.
6. Toshiro Ohta, Eriko Ishizu-Nagashima, Sayaka Mizuno, Ryo Miyata, Boonyadist Vongsak, Shigenori Kumazawa: Anti-angiogenic activity of mangostins isolated from Thailand stingless bee propolis. *Nat. Prod. Commun.*, **2023**, 18, 1-7.
7. Sayaka Mizuno, Ryo Miyata, Agus Sukito, Muhamad Sahlan, Shigenori Kumazawa: A new chromanone derivative from *Calophyllum inophyllum* resin and its antibacterial activity. *Rec. Nat. Prod.*, **2023**, 17, 1085-1089.
8. Wataru Kadowaki, Ryo Miyata, Sayaka Mizuno, Misa Fujinami, Yoshizumi Sato, Shigenori Kumazawa: Prenylated acetophenones from the roots of *Calendula officinalis* and their anti-inflammatory activity. *Biosci. Biotechnol. Biochem.*, **2023**, 87, 683-687.
9. Sayaka Mizuno, Ryo Miyata, Muhamad Sahlan, Shigenori Kumazawa: Improvement of water solubility and antibacterial activity of *Calophyllum inophyllum* resin and calophylloidic acid A via inclusion complexation with cyclodextrins. *Food Sci. Technol. Res.*, **2023**, 29, 301-307.
10. Aoi Yanagihara, Ryo Miyata, Taichi Mitsui, Hajime Sato, Shigenori Kumazawa: Two new hydroxycinnamoyl acid amides isolated from Australian bee pollen using molecular networking analysis. *Phytochem. Lett.*, **2023**, 54, 91-96.
11. Wataru Kadowaki, Ryo Miyata, Misa Fujinami, Yoshizumi Sato, Shigenori Kumazawa: Catechol-*O*-methyltransferase Inhibitors from *Calendula officinalis* Leaf. *Molecules*, **2023**, 28, 1333.

12. Chie Watanabe, Ryo Miyata, Sachio Wakayama, Shigenori Kumazawa: New acylated flavonoid isolated from Thai bee pollen using molecular networking analysis and determination of its catechol-*O*-methyltransferase inhibitory activity. *Phytochem. Lett.*, **2023**, 53, 239-244.
13. Wataru Kadowaki, Yuki Sugahara, Tomoyasu Toyoizumi, Teruko Nakajima, Shigenori Kumazawa: Isolation and identification of antioxidant phenylpropanoids from the fruit peel of *Akebia trifoliata* Koidz. *Food Sci. Technol. Res.*, **2023**, 29, 27-34.
14. Ryo Miyata, Hitomi Sano, Sara Hoshino, Shigenori Kumazawa: Thermostability and catechol-*O*-methyltransferase inhibitory activity of acylated anthocyanins from purple yam. *Biosci. Biotechnol. Biochem.*, **2022**, 86, 916-921.
15. Ryo Miyata, Hitomi Sano, Shigenori Kumazawa: New acylated anthocyanin isolated from purple yam using molecular networking analysis. *Food Sci. Technol. Res.*, **2022**, 28, 329-334.
16. Kazuma Mukaide, Yuko Shimamura, Shuichi Masuda, Boonyadist Vongsak, Shigenori Kumazawa: Antibacterial and antibiofilm activities of Thailand propolis against *Escherichia coli*. *Nat. Prod. Commun.*, **2022**, 17, 1-5.
17. Ryo Miyata, Sara Hoshino, Mok-Ryeon Ahn, Shigenori Kumazawa: Chemical profiles of Korean bee pollens and their catechol-*O*-methyltransferase inhibitory activities. *J. Agric. Food Chem.*, **2022**, 70, 1174-1181.
18. Sayaka Mizuno, Ryo Miyata, Kazuma Mukaide, Sari Honda, Agus Sukito, Muhamad Sahlan, Tohru Taniguchi, Shigenori Kumazawa: New compound from the plant origin of propolis from Lombok, Indonesia and its antibacterial activity. *Results Chem.*, **2022**, 100276.
19. Yuki Sugahara, Toshiro Ohta, Yoshiki Taguchi, Wataru Kadowaki, Sari Honda, Yasuhiro Kashima, Taiji Matsukawa, Shigenori Kumazawa: Resveratrol derivative production by high-pressure treatment: proliferative inhibitory effects on cervical cancer cells. *Food Nutr. Res.*, **2022**, 66, 7638.
20. Takanori Tsuda, Shigenori Kumazawa: Propolis: Chemical constituents, plant origin, and possible role in the prevention and treatment of obesity and diabetes. *J. Agric. Food Chem.*, **2021**, 69, 15484-15494.
21. Ryo Miyata, Tomoharu Motoyama, Shogo Nakano, Sohei Ito, Kazuma Mukaide, Boonyadist Vongsak, Shigenori Kumazawa: Catechol-*O*-methyltransferase inhibitors isolated from Thai propolis. *Nat. Prod. Commun.*, **2021**, 16, 1-5.
22. Kohsuke Shimomura, Hironari Kako, Hidehiko Yokogoshi, Mok-Ryeon Ahn, Shigenori Kumazawa: Promotion effect of the propolis from Jeju Island, Korea, on NGF secretion in human glioblastoma cells. *J. Nat. Med.*, **2021**, 75, 1030-1036.
23. Kazuma Mukaide, Sari Honda, Boonyadist Vongsak, Shigenori Kumazawa: Prenylflavonoids from propolis collected in Chiang Mai, Thailand. *Phytochem. Lett.*, **2021**, 43, 88-93.
24. Saori Inui, Takahiro Hosoya, Kazuma Yoshizumi, Hajime Sato, Shigenori Kumazawa:

- Phytochemical and anti-inflammatory properties of Senegalese propolis and isolated compounds. *Fitoterapia*, **2021**, 151, 104861.
25. Naoki Okamura, Toshiro Ohta, Kazuhiro Kunimasa, Yoshihiro Uto, Shigenori Kumazawa: Antiangiogenic activity of flavonols in chorioallantoic membrane (CAM) assay. *Food Sci. Technol. Res.*, **2020**, 26, 891-896.
 26. Takuma Kurata, Naoki Misawa, Takahiro Hosoya, Tomoe Yamada-Kato, Isao Okunishi, Shigenori Kumazawa: Isolation and identification of compounds from wasabi (*Wasabia japonica* Matsumura) flowers and investigation of their antioxidant and anti-inflammatory activities. *Food Sci. Technol. Res.*, **2019**, 25, 449-457.
 27. Ryo Miyata, Muhamad Sahlan, Yoshinobu Ishikawa, Hiroshi Hashimoto, Sari Honda, Shigenori Kumazawa: Propolis components from stingless bees collected on South Sulawesi, Indonesia, and their xanthine oxidase inhibitory activity. *J. Nat. Prod.*, **2019**, 82, 205-210.
 28. Eriko Ishizu, Sari Honda, Boonyadist Vongsak, Shigenori Kumazawa: Identification of plant origin of propolis from Thailand stingless bees by comparative analysis. *Nat. Prod. Commun.*, **2018**, 13, 973-975.
 29. Naoki Misawa, Takahiro Hosoya, Shuhei Yoshida, Osamu Sugimoto, Tomoe Yamada-Kato, Shigenori Kumazawa: 5-Hydroxyferulic acid methyl ester isolated from wasabi leaves inhibits 3T3-L1 adipocyte differentiation. *Phytother. Res.*, **2018**, 32, 1304-1310.
 30. Eriko Ishizu, Sari Honda, Boonyadist Vongsak, Shigenori Kumazawa: Identification of plant origin of propolis from Thailand stingless bees by comparative analysis. *Nat. Prod. Commun.*, **2018**, 13, 973-975.
 31. Kazuki Yoshimura, Takahiro Hosoya, Misa Fujinami, Toshiro Ohta, Shigenori Kumazawa: Nymphaeol-C, a prenylflavonoid from *Macaranga tanarius*, suppresses the expression of fibroblast growth factor 18. *Phytomedicine*, **2017**, 36, 238-242.
 32. Koharu Okumura, Hiroo Matsui, Takahiro Hosoya, Shigenori Kumazawa: Effect of harvest time in some in vitro functional properties of hop polyphenols. *Food Chem.*, **2017**, 225, 69-76.
 33. Koharu Okumura, Takahiro Hosoya, Kai Kawarazaki, Norihiko Izawa, Shigenori Kumazawa: Antioxidant activity of phenolic compounds from fava bean sprouts. *J. Food Sci.*, **2016**, 81, 1394-1398.
 34. Chiemi Moriya, Takahiro Hosoya, Sayuri Agawa, Yasumasa Sugiyama, Ikuko Kozono, Kazuo Shin-ya, Norihiko Terahara, Shigenori Kumazawa: New acylated anthocyanins from purple yam and their antioxidant activity. *Biosci. Biotechnol. Biochem.*, **2015**, 79, 1484-1492.
 35. Shuhei Yoshida, Takahiro Hosoya, Saori Inui, Hideki Masuda, Shigenori Kumazawa: Component analysis of wasabi leaves and an evaluation of their anti-inflammatory activity. *Food Sci. Technol. Res.*, **2015**, 21, 247-253.
 36. Saori Inui, Ai Hatano, Megumi Yoshino, Takahiro Hosoya, Yuko Shimamura, Shuichi

- Masuda, Mok-Ryeon Ahn, Shigemi Tazawa, Yoko Araki, Shigenori Kumazawa: Identification of the phenolic compounds contributing to antibacterial activity in ethanol extracts of Brazilian red propolis. *Nat. Prod. Res.* **2014**, 28, 1293-1296.
37. Masato Nishizawa, Takahiro Hosoya, Takatsugu Hirokawa, Kazuo Shin-ya, Shigenori Kumazawa: NMR spectroscopic characterization of inclusion complexes of theaflavin digallate and cyclodextrins. *Food Sci. Technol. Res.* **2014**, 20, 663-669.
 38. Makoto Kobayashi, Masato Nishizawa, Nao Inoue, Takahiro Hosoya, Masahito Yoshida, Yuichi Ukawa, Yuko M Sagesaka, Takayuki Doi, Tsutomu Nakayama, Shigenori Kumazawa, Ikuo Ikeda: Epigallocatechin gallate decreases the micellar solubility of cholesterol via specific interaction with phosphatidylcholine. *J. Agric. Food Chem.*, **2014**, 62, 2881-2890.
 39. Seon-II Park, Toshiro Ohta, Shigenori Kumazawa, Mira Jun, Mok-Ryeon Ahn: Korean propolis suppresses angiogenesis through inhibition of tube formation and endothelial cell proliferation. *Nat. Prod. Commun.* **2014**, 9, 555-560.
 40. Michiyo Kubota, Takahiro Hosoya, Syuichi Fukumoto, Tsuyoshi Miyagi, Shigenori Kumazawa: Anti-melanogenic compounds in *Rubus croceacanthus*. *J. Berry Res.* **2014**, 4, 127-135.
 41. Saori Inui, Takahiro Hosoya, Shigenori Kumazawa: Hawaiian propolis: comparative analysis and botanical origin. *Nat. Prod. Commun.* **2014**, 9, 165-166.
 42. Shigenori Kumazawa, Masayo Murase, Noboru Momose, Syuichi Fukumoto: Analysis of antioxidant prenylflavonoids in different parts of *Macaranga tanarius*, the plant origin of Okinawan propolis. *Asian Pac. J. Trop. Med.* **2014**, 7, 16-20.

Award

1. Shigenori Kumazawa, Award at The Japanese Society for Food Science and Technology 2024
2. Shigenori Kumazawa, World Class Professor Award, Republic of Indonesia 2018
3. Shigenori Kumazawa, Research Award at Society for Okinawa 2010
4. Shigenori Kumazawa, Research Award at The Japanese Society for Food Science and Technology 2007
5. Shigenori Kumazawa, BBB Journal Award 2002