Editorial

The present editorial team of the *Journal of Pesticide Science (JPS)* started in April 2017 and will end in March 2021. The new editorial team will start in April 2021 under the new Editor-in-Chief, Dr. Kazuhiro Takagi. The *JPS* was accepted as a PubMed Central (PMC) journal in October 2018, and publications in the *JPS* can be found via PubMed search dating back to 2016 (Vol. 41, No. 1). The *JPS* was also listed in the Directory of Open Access Journals (DOAJ) in January 2020. Along with this, the article title page has been renewed from Vol. 46 (2021). The new title page is set as a color page, and a graphical abstract is inserted near the Abstract text. Articles (**Regular Article**, **Brief Report**, **Review**, and **Technical Report**) are welcome to be submitted. **Commentary** and **Society Award Paper** entries are also published when needed. A color manuscript is only available on the website. The print version is published in black and white.

During this editorial team, the editorial board edited a second “Special Issue” of *JPS*, which is for insect growth regulators (IGRs). The first special issue, on plant growth regulators (PGRs), was published in 2018 (Vol. 43, No. 3). Prior to the publication of these special issues, a “special topic” was published three times, as follows.

1. Application of omics-technologies to the agricultural and environmental sciences: 5 Reviews and 4 Commentary (2006).
2. Recent advances in studies on actions of pesticides and bioactive molecules: 1 Review and 8 Commentaries (2008).
3. Carboxylesterases—from function to the field: an overview of carboxylesterase biochemistry, structure-activity relationship, and use in the environment: 8 Reviews, 1 Original Article, and 2 Commentaries (2010).

To edit current special issue, I asked invited speakers of the PacifiChem2020 symposium to contribute to the *JPS*. Although PacifiChem2020 was postponed until 2021 because of the COVID-19 pandemic, the editorial board decided to edit the special issue about IGRs for the *JPS*. The symposium title in PacifiChem2020 was “Future of Insect Growth Regulators and Utilization of in Silico Technology.” In the special issue of the *JPS*, 5 Reviews, 8 Regular Articles, and 1 Brief Report are posted, in which juvenile hormone, molting hormone, and chitin-relat-

ed studies are described. I also asked Marek Jindra, who is currently the editor of *Insect Biochemistry and Molecular Biology*, to contribute to the writing of “Commentary” for this special issue.

I surveyed the contents of the *JPS*, the first volume of which was published in 1976. The research topics covered in this journal have changed drastically during the past half century. English papers published in the first issue of Vol. 1 were mainly related to useful pesticides such as gamma BHC, sumithion, malathion, polyoxin, pyrethroids, and benthicarb, but the majority of recent publications pertain to the environmental science of pesticides. Of course, the discovery studies of novel pesticides have been continuously published. The history of the PSSJ and *JPS* is summarized in *Japanese Journal of Pesticide Science (JJPS)*, Vol. 44, No. 1, 2019). In the searching of past articles published in the *JPS* and *JJPS*, I found a commentary related to IGRs, titled “Progress in insect control chemicals from juvenile hormone research,” written by Dr. Gerald T. Brooks. This commentary was published in Vol. 12, No. 1, 113–123 (1987). The contents of his commentary are

Synthesis directed by the juvenile hormone structure

Fig. 1 Structures of chemicals mentioned in the text

Structural directions from biochemical investigations

1. Juvenile hormone biosynthesis

Fig. 2 Biosynthesis and biodegradation of insect juvenile hormone, using JH III as an example

2. Juvenile hormone biodegradation

Fig. 3 Bioactivation of precocenes related compounds.

Fig. 4 Structures of chemistry mentioned in the text.

Future prospects

As shown in this special issue, studies with new technologies such as rational design, high-throughput screening, and virtual screening are contained. Original papers on new chemistry and bioassays are published. New targets, such as insect growth regulators, are proposed for future papers.

Editor-In-Chief of Journal of Pesticide Science
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