

Dr hab. inż. Jadwiga TOPCZEWSKA
Dr inż. Małgorzata ORMIAN
Dr inż. Anna AUGUSTYŃSKA-PREJSNAR
Department of Animal Production and Poultry Products Evaluation
University of Rzeszow, Poland
Zakład Produkcji Zwierzęcej i Oceny Produktów Drobiarskich
Uniwersytet Rzeszowski, Polska

FOOD SAFETY AND SUPERVISION IN IJHARS ACTIVITIES®

Bezpieczeństwo i nadzór nad żywnością w działalności IJHARS®

Key words: surveillance, food safety, notifications of non-compliance.

The article presents the results of research concerning the assess the scale and type of irregularities found during the inspections conducted by IJHARS in 2017-2021. The research material was the results published by IJHARS, i.e. Annual Reports for 2017–2021. Notifications by category were taken into account. Food and food contact materials were taken into account in the statements. In subsequent years, the number of reported irregularities increased. It was shown that in each year the group of most frequently reported irregularities included meat and meat preparations; fish and fish preparations; fruits, vegetables and their preparations; and dietary supplements. A slight upward trend was found for fish and fish preparations, whereas a downward trend was found for the others. Fats and oils were a significant item in 2021.

Słowa kluczowe: nadzór, bezpieczeństwo żywności, zgłoszenia niezgodności.

W artykule przedstawiono prezentację wyników badań dotyczących oceny skali i rodzaju nieprawidłowości stwierdzanych podczas kontroli prowadzonych przez IJHARS w latach 2017-2021. Materiał badawczy stanowiły wyniki publikowane przez IJHARS, tj. Raporty roczne za lata 2017–2021. Uwzględniono zgłoszenia z podziałem na kategorie. W zestawieniach brano pod uwagę żywność oraz materiały mające kontakt z żywnością. W kolejnych latach wzrastała liczba zgłaszanych nieprawidłowości. Wykazano, że w każdym roku w grupie najczęściej zgłaszanych nieprawidłowości było mięso i przetwory mięsne; ryby i przetwory rybne; owoce, warzywa i ich przetwory oraz suplementy diety. W przypadku ryb i ich przetworów stwierdzono nieznaczny trend wzrostowy, natomiast spadkowy dla pozostałych. W 2021 roku znaczącą pozycję stanowiły tłuszcze i oleje.

INTRODUCTION

Food safety is the totality of conditions that must be met. They include: additives and flavors used; levels of contaminants; pesticide residues; conditions of food irradiation; organoleptic characteristics, as well as the totality of measures that must be taken at all stages of food production or trade [11]. Before the introduction of the Law of 25 August 2006, the concept of quality of health was in force in Polish law. Since 2006, the concept of “health quality” has been replaced by an expanded concept, “food safety” [3]. As Szreniawska [2018] points out, to ensure food safety, the legislator has introduced official inspections. Several inspections are responsible for ensuring food safety in Poland, and the model they have created has been described as distributed [8]. The Agricultural and Food Quality Inspection (IJHARS) inspects the commercial quality of food in the producer and wholesale, including storage and transportation conditions. Commercial Inspection (IH), on the other hand, takes care of the commercial quality of food in retail. According to the Law on Commercial Quality of Agri-Food Articles of December 21, 2000, commercial quality

is the characteristics of an agri-food article relating to its organoleptic, physicochemical and microbiological properties in terms of production technology, size or weight, as well as requirements resulting from the manner of production, packaging, presentation and labeling [10]. Importantly, IJHARS is required to provide the European Commission with information on the results of inspections at all stages of marketing. It is responsible for notifying the national point of contact under the RASFF network of the Rapid Alert System for Food and Feed Network (iRASFF system), as well as the actions taken regarding unsafe agri-food items.

The RASFF system is used for the rapid exchange of information on hazards detected in food, feed, and food contact materials [3, 4]. It is administered by the European Commission and was introduced by Council Decision No. 133/84/EEC of March 2, 1984 on a Community system for the rapid exchange of information on hazards arising from the use of consumer products. Currently, the system operates on the basis of Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002 laying

down the general principles and requirements of food law, establishing the European Food Safety Authority, and laying down procedures in matters of food safety. As of March 2021, networks such as the Rapid Alert System for Food and Feed (RASFF) network, the Administrative Assistance and Cooperation (AAC) systems network, and the Food Fraud Network (FFN) have been working together to enable efficient exchange of information between the competent authorities of member states and facilitate cooperation between them [6]. The European Commission is the administrator of the system.

The article presents the results of research concerning the assess the scale and type of irregularities found during the inspections conducted by IJHARS in 2017–2021.

MATERIAL AND METHODS

The research material consisted of results published by the Agricultural and Food Quality Inspection (IJHARS), i.e., Annual Reports for 2017–2021. Submissions by category were included. The food and materials in contact with food were taken into account in the statements. In the percentage structure, those with at least 2% were presented as separate categories. The others were given together as other. A polynomial trend line was drawn for the categories of reports occurring in each year, i.e., meat and meat preparations; fish and fish preparations; fruits, vegetables and their preparations; and dietary supplements. Calculations were performed using Statistica 13.3.

RESULT AND DISCUSSION

Inspections carried out by IJHARS from 2017 to 2021 showed that meat and meat preparations were the category most frequently reported. Their scale ranged from 26.1% in 2017 (Fig. 1) to 39.6% in 2018 (Fig. 2). In 2017, a high share of notifications was found for fish and fish preparations and dietary supplements /special-purpose products, with 15.9% each in both categories. Data from the 2017 RASFF Annual Report indicate that fish and fish products were the category most frequently reported [4]. Fruits, vegetables and their preparations were also a significant item in 2019. It was 14.2% (Fig. 3). This category was present in every year analyzed, with only 2.8% in 2018 (Fig. 2). Also, a relatively high number of irregularities for dietary supplements were reported. The highest number was found in 2017 and 2020, 15.9% and 14.8%, respectively (Fig. 1 and Fig. 4). In contrast, in 2021, reports of irregularities for the oils and fats category accounted for 18% (Fig. 5). For IJHARS, the definition of adulterated agri-food article found in the Law on Commercial Quality of Agri-Food Articles was decisive in qualifying irregularities [8]. According to Fraś et al. [1], the implementation of the idea of health-safe food cannot be done only by inspecting finished food products. Examination of food products at the end of the technological manufacturing or processing process is not and cannot be sufficient to

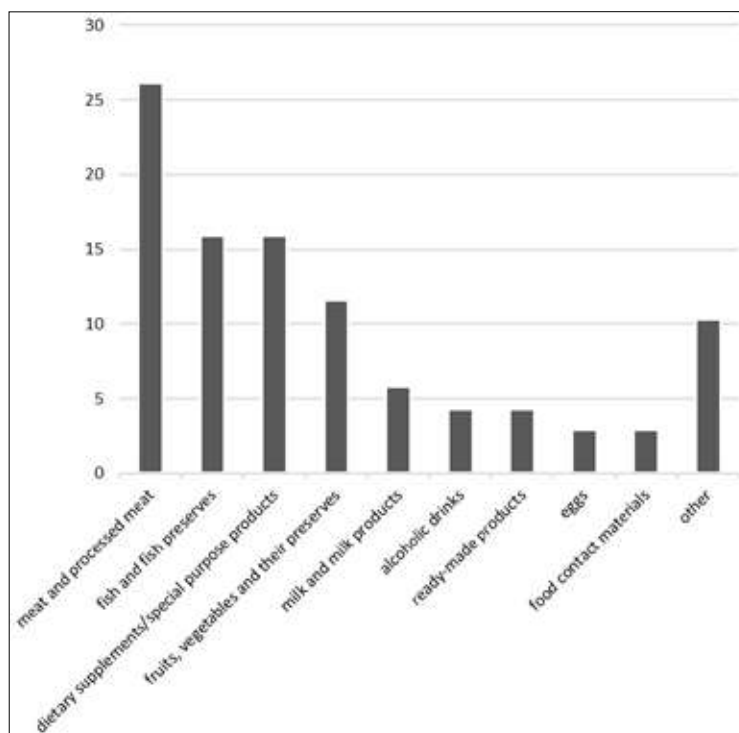


Fig. 1. IJHARS notifications in the AAC system by category in 2017 (%).

Rys. 1. Zgłoszenia IJHARS w systemie AAC z podziałem na kategorie w 2017 roku (%).

Source: The own study [12]

Źródło: opracowanie własne [12]

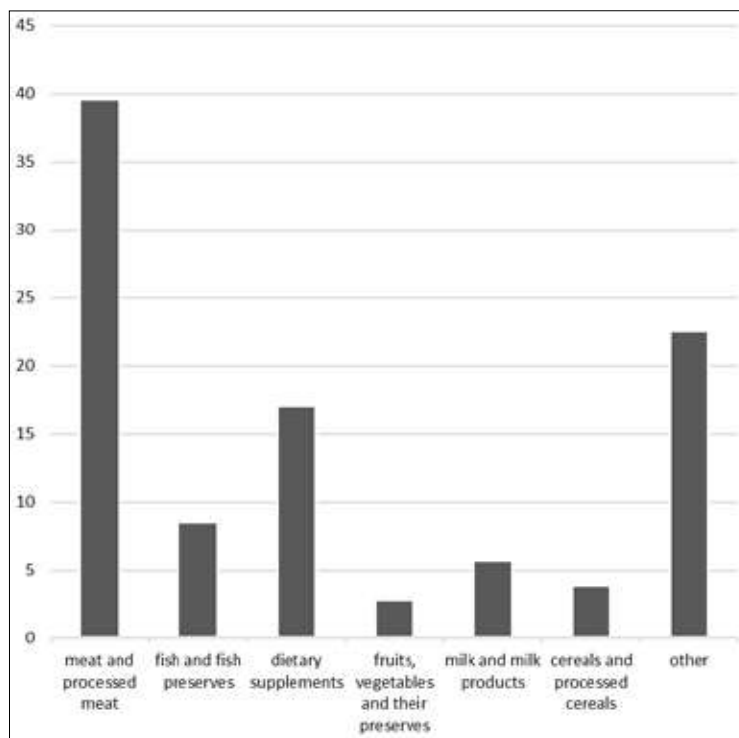


Fig. 2. JHARS notifications in the AAC system by category in 2018 (%).

Rys. 2. Zgłoszenia IJHARS w systemie AAC z podziałem na kategorie w 2018 roku (%).

Source: The own study [13]

Źródło: opracowanie własne [13]

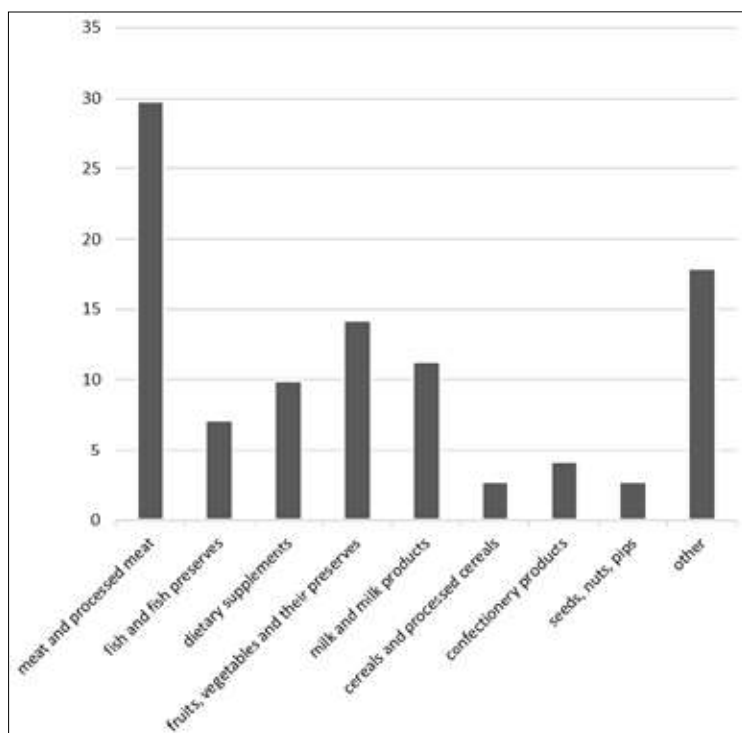


Fig. 3. IJHARS notifications in the AAC system by category in 2019 (%).

Rys. 3. Zgłoszenia IJHARS w systemie AAC z podziałem na kategorie w 2019 roku (%).

Source: The own study [14]

Źródło: opracowanie własne [14]

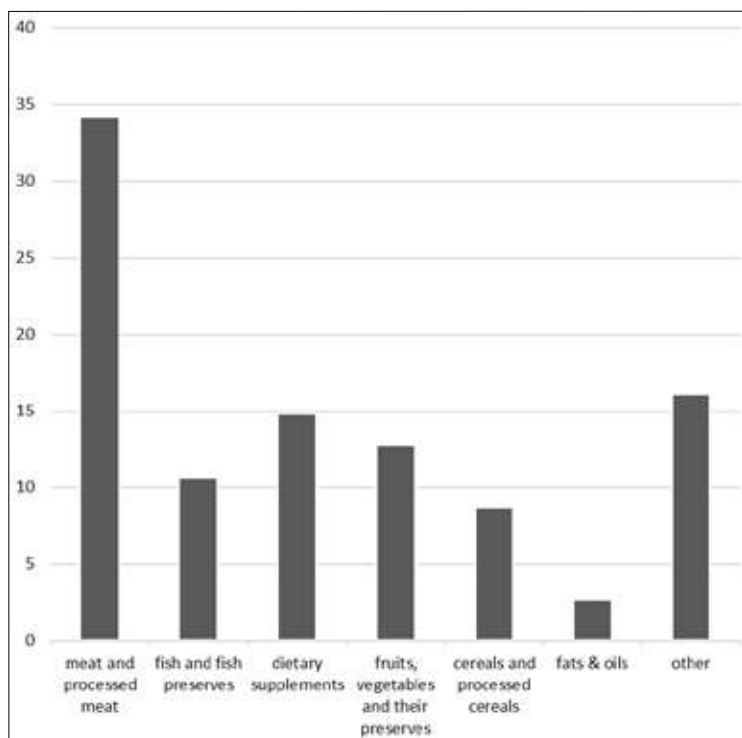


Fig. 4. IJHARS notifications in the iRASFF/ACC-FF system by category in 2020 (%).

Rys. 4. Zgłoszenia IJHARS w systemie iRASFF/ACC-FF z podziałem na kategorie w 2020 roku (%).

Source: The own study [15]

Źródło: opracowanie własne [15]

confirm the appropriate quality and to gain confidence that these products are nutritionally valuable and health safe. The quality management system in agribusiness should be built so that it can be easily programmed, managed, and verified the quality of the production and food produced. The requirements for the quality of manufactured food products are very high and industrial plants, which operate on the basis of quality management programs (GHP, GMP) and the principles of the HACCP system, can ensure the maximum level of safety of manufactured food. It should be noted that thanks to the responsible approach of producers, as well as the effective supervision provided by supervisory institutions, the marketed products are characterized by a high level of safety [2].

The trend analysis for the categories occurring in each year analyzed, i.e., meat and meat preparations; fish and fish preparations; fruits, vegetables and their preparations; and dietary supplements, showed an upward trend only for fruits, vegetables and their preparations. The Law on Commercial Quality [7] excludes health, sanitary, veterinary, and phytosanitary requirements for agri-food items specified in separate regulations from the Inspectorate's scope. However, this does not mean that IJHARS does not have any competencies related to food safety. They concern, for example, the conditions of storage and transport of agri-food articles, assessment of expiration dates or dates of minimum durability a from the point of view of adulteration. The increase in the number of notifications in subsequent years indicates an increase in the number of inspections, but also about the involvement of the Inspectorate. Similarly, as stated in the RASFF report, an increase in the number of notifications for each component of the warning and cooperation network was found in 2021 compared to previous years. This demonstrates the continued commitment of Member States' competent authorities, despite the challenging context of the Covid-19 pandemic, to detect and report noncompliance, whether or not it poses a health risk or is suspected of fraudulent practices [16]. In 2021, all members of the alert and cooperation network were active in the RASFF network, with Germany, Spain, and the Netherlands being the most active with 761,524 and 446 notifications, respectively, followed by Belgium (389), Italy (389) and Poland (335). In 2021, the number of non-compliance reports rose to 2290, and the majority were food-related issues (84%) [16]. In 2021, the most frequently reported product category was fruits and vegetables, accounting for 15% in the system. The second most frequently reported category was dietary foods, dietary supplements and fortified foods (10%), most of which were sold online. Meat and meat products were the third most frequently reported category (6%), with violations ranging from incomplete ingredient and traceability labels to missing or incomplete documentation [16].

CONCLUSIONS

The increasing number of reported irregularities found through inspections by IJHARS between 2017 and 2021 indicates a commitment to ensuring food safety. Providing such information to the iRASFF early warning system increases the credibility of control institutions in the food chain.

WNIOSKI

Zwiększająca się w latach 2017–2021 liczba zgłaszanych nieprawidłowości stwierdzanych w wyniku kontroli prowadzonych przez IJHARS wskazuje na zaangażowanie w zapewnienie bezpieczeństwa żywności. Przekazywanie takich informacji do systemu wczesnego ostrzegania iRASFF zwiększa wiarygodność instytucji kontrolujących w łańcuchu żywności.

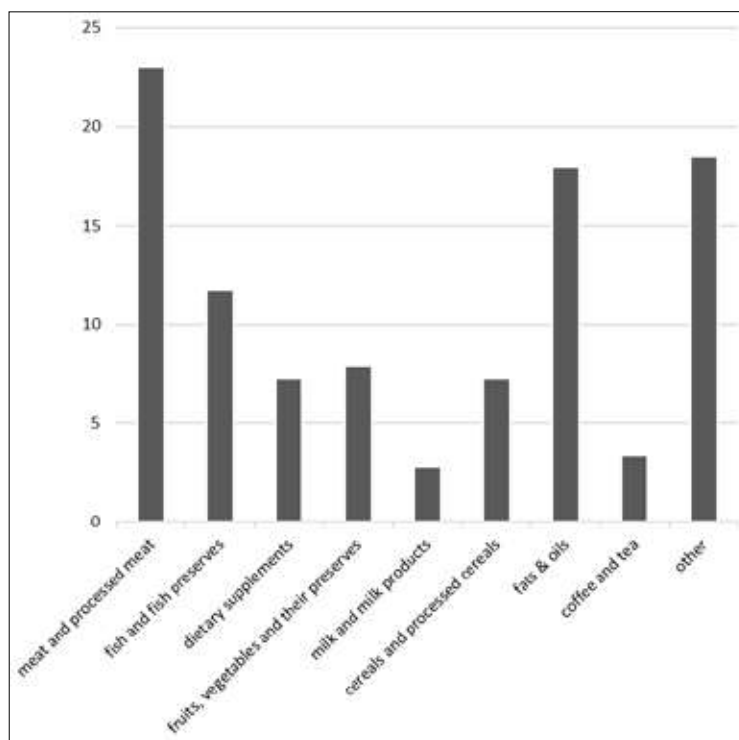


Fig. 5. IJHARS notifications in the iRASFF/ACC-FF system by category in 2021 (%).

Rys. 5. Zgłoszenia IJHARS w systemie iRASFF/ACC-FF z podziałem na kategorie w 2021 roku (%).

Source: The own study [16]

Źródło: opracowanie własne [16]

REFERENCES

- [1] **FRAŚ J., P. ŻUKOWSKI, T. FRAŚ, M. FRAŚ. 2017.** „Proinnowacyjny model zintegrowanego systemu zarządzania jakością i bezpieczeństwem żywności”. *Problemy Nauk Stosowanych* 6: 189–198. DOI: 10.18276/frfu.2016.4.82/1–28
- [2] **MAJEWSKI M., L. DZIUBDZIELA. 2018.** „Analiza powiadomień dotyczących żywności pochodzenia zwierzęcego zgłoszonych do RASFF przez Polskę”. *Życie Weterynaryjne* 93 (03): 181–183.
- [3] **OMIECIUCH J. 2016.** Jakość i bezpieczeństwo żywności w Polsce. *Spółeczeństwo i Ekonomia* 2 (6): 123–136. DOI: 10.15611/sie.2016.2.09
- [4] **RASFF. The Rapid Alert System for Food and Feed – 2017 Annual Report.** Luxembourg: Publications Office of the European Union, 2018.
- [5] **RASFF. The Rapid Alert System for Food and Feed – 2021 Annual Report.** Luxembourg: Publications Office of the European Union, 2022.
- [6] **ROZPORZĄDZENIE WYKONAWCZE KOMISJI (UE) 2019/1715 z dnia 30 września 2019 r.** ustanawiające przepisy dotyczące funkcjonowania systemu zarządzania informacjami w zakresie kontroli urzędowych oraz jego składników systemowych („rozporządzenie w sprawie systemu IMSOC”).

REFERENCES

- [1] **FRAS J., P. ZUKOWSKI, T. FRAS, M. FRAS. 2017.** „Proinnowacyjny model zintegrowanego systemu zarządzania jakością i bezpieczeństwem żywności”. *Problemy Nauk Stosowanych* 6: 189–198. DOI: 10.18276/frfu.2016.4.82/1–28
- [2] **MAJEWSKI M., L. DZIUBDZIELA. 2018.** „Analiza powiadomień dotyczących żywności pochodzenia zwierzęcego zgłoszonych do RASFF przez Polskę”. *Życie Weterynaryjne* 93 (03): 181–183.
- [3] **OMIECIUCH J. 2016.** Jakość i bezpieczeństwo żywności w Polsce. *Spółeczeństwo i Ekonomia* 2 (6): 123–136. DOI: 10.15611/sie.2016.2.09
- [4] **RASFF. The Rapid Alert System for Food and Feed – 2017 Annual Report.** Luxembourg: Publications Office of the European Union, 2018.
- [5] **RASFF. The Rapid Alert System for Food and Feed – 2021 Annual Report.** Luxembourg: Publications Office of the European Union, 2022.
- [6] **ROZPORZĄDZENIE WYKONAWCZE KOMISJI (UE) 2019/1715 z dnia 30 września 2019 r.** ustanawiające przepisy dotyczące funkcjonowania systemu zarządzania informacjami w zakresie kontroli urzędowych oraz jego składników systemowych („rozporządzenie w sprawie systemu IMSOC”).

- [7] **SERLIKOWSKA A. 2019.** „Wdrażanie unijnej reformy urzędowej kontroli żywności – rozproszenie kompetencji krajowych organów”. *Kontrola Państwowa* 64, 6 (389): 29–44.
- [8] **SZEWczyk P., M. KUZAN. 2020.** „Bezpieczeństwo żywności na polskim rynku: Konieczne usprawnienie działań inspekcji”. *Kontrola Państwowa* 65, 4 (393): 68–75.
- [9] **SZRENIAWSKA M. 2018.** „Urzędowe kontrole żywności”. *Przegląd Prawno-Ekonomiczny* (43): 381–390.
- [10] **Ustawa z dnia 21 grudnia 2000 r.** o jakości handlowej artykułów rolno-spożywczych (Dz. U. 2021 r., poz. 630).
- [11] **Ustawy o bezpieczeństwie żywności i żywienia z dnia 25 sierpnia 2006 r.** (Dz.U. nr 171, poz. 1225).
- [12] **ZDROJEWSKA I. (red.). 2018.** Sprawozdanie roczne. Annual Report 2017. Inspekcja Jakości handlowej Artykułów Rolno-Spożywczych, Agricultural and Food Quality Inspection, Warszawa.
- [13] **ZDROJEWSKA I. (red.). 2019.** Sprawozdanie roczne. Annual Report 2018. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural and Food Quality Inspection, Warszawa.
- [14] **ZDROJEWSKA I. (red.) 2020.** Sprawozdanie roczne. Annual Report 2019. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.
- [15] **ZDROJEWSKA I. (red.) 2021.** Sprawozdanie roczne. Annual Report 2020. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.
- [16] **ZDROJEWSKA I. (red.) 2022.** Sprawozdanie roczne. Annual Report 2021. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.

- [7] **SERLIKOWSKA A. 2019.** „Wdrażanie unijnej reformy urzędowej kontroli żywności – rozproszenie kompetencji krajowych organów”. *Kontrola Państwowa* 64, 6 (389): 29–44.
- [8] **SZEWczyk P., M. KUZAN. 2020.** „Bezpieczeństwo żywności na polskim rynku: Konieczne usprawnienie działań inspekcji”. *Kontrola Państwowa* 65, 4 (393): 68–75.
- [9] **SZRENIAWSKA M. 2018.** „Urzędowe kontrole żywności”. *Przegląd Prawno-Ekonomiczny* (43): 381–390.
- [10] **Ustawa z dnia 21 grudnia 2000 r.** o jakości handlowej artykułów rolno-spożywczych (Dz. U. 2021 r., poz. 630).
- [11] **Ustawy o bezpieczeństwie żywności i żywienia z dnia 25 sierpnia 2006 r.** (Dz.U. nr 171, poz. 1225).
- [12] **ZDROJEWSKA I. (red.). 2018.** Sprawozdanie roczne. Annual Report 2017. Inspekcja Jakości handlowej Artykułów Rolno-Spożywczych, Agricultural and Food Quality Inspection, Warszawa.
- [13] **ZDROJEWSKA I. (red.). 2019.** Sprawozdanie roczne. Annual Report 2018. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural and Food Quality Inspection, Warszawa.
- [14] **ZDROJEWSKA I. (red.) 2020.** Sprawozdanie roczne. Annual Report 2019. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.
- [15] **ZDROJEWSKA I. (red.) 2021.** Sprawozdanie roczne. Annual Report 2020. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.
- [16] **ZDROJEWSKA I. (red.) 2022.** Sprawozdanie roczne. Annual Report 2021. Inspekcja Jakości Handlowej Artykułów Rolno-Spożywczych, Agricultural And Food Quality Inspection, Warszawa.