

## GRAIN AND FOOD SECURITY AS A TOOL OF BIOPOLITICS: REAL-TIME INTERNET MONITORING AND CRISIS MANAGEMENT

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### ABSTRACT

**Introduction and Methods.** The aim of this study was to perform real-time monitoring of the interest on the Internet in topics related to “food security,” “poisoned grain,” and “pesticides” in central-eastern (CE) Europe (mainly Poland) in April 2023, with a focus on crisis management in context of food and information security. The article explores the phases of media coverage during the climax period and identifies the involvement of right/left-wing, mainstream, and Kremlin propaganda narratives.

**Results.** We differentiate the following phases of the interest: 1) farmers protests in CE Europe; 2) a peak phase with mainstream media attention on April 14, characterised by negative sentiment; 3) mixed right-left phase with high traffic and small reach; 4) a com-

menting phase with traditional media engagement from April 17; and finally, 5) a Kremlin propaganda phase targeting the internal market on April 18-19, with limited impact on the Polish infosphere, but entering Bulgaria and Romania's infosphere.

**Conclusions.** The success of the misinformation campaign is highlighted in the context of food security. The study suggests that the Kremlin aims to exploit existing problems and conflicts to generate disputes between Poland, Ukraine, and the EU. The role of other internal and external forces in affecting the information landscape is considered. Overall, this study aims to provide insights into handling misinformation and crisis management in the domain of food security.

**Keywords:** media monitoring, information security, food security

### INTRODUCTION - FOOD AS A WEAPON

Access to food in acceptable form is one of the human rights (Geneva Convention, 1977). An important element of the actions of the Russian aggressor during the war in Ukraine is the desire to undermine food security of a country struggling with the burden of warfare. With reference to Clausewitz's theory (Clausewitz, 1958), the events noted by international services, among others: attempts to destroy grain elevators with unmanned aerial vehicles, or preventing transport by sea; given the degree of globalisation, and thus the functioning of supply chains, the activities of multinational corporations, decisions at the level of individual countries cooperating within the EU, are an integral part of the devastating war in Ukraine and actions against humanity. Actions of this nature, for the Polish state bordering Ukraine, are an important argument for the measures taken to ensure security, including food security.

Restricting physical access to food in an abnormal situation, which includes, first and foremost, warfare, but also the period of the Covid-19 pandemic (Stochmal et al., 2021), reveals a group need to provide society with at least basic food needs. Nowadays, the literature increasingly emphasises the need to both accumulate food reserves and carry out manufacturing activities in this regard. It is essential to cooperate in the creation of a food volume that can guarantee a minimum security of existence. This demand must be covered by domestic production, excluding exports. The problem, which was undoubtedly created by imported grain from Ukraine, had an impact on the periodic deterioration of the country's food security. Import dependence is an important factor affecting national security (Hopkins & Puchala, 1980). The greater the share of imported grain that is used to cover the demand - the less food security a particular country has. The state, when conducting food policy, focuses on rationalising food consumption. To this end, launching a whole arsenal of measures informs about the ways and possibilities of rationalisation.

Information security includes all activities, methods and systems aimed at securing the resources collected, processed, shared and stored in the memories of computers and ICT networks. With regard to the state's tasks, ensuring information security and food security is an element of the state's resilience. It is important to maintain symmetry between state sovereignty, security threats, and information exchange with foreign partners. This task is pursued by civilian and mili-

tary press services (Domalewska, 2019). Errors in the implementation of the tasks of the various information chain links can lead to significant consequences for state security. The large-scale use of “information dominance” is required for both preventive and aggressive action. A modern asymmetric attack is the sum of the attacker’s imagination and invention, the resources at his disposal and the weak elements of the national security system.

### FOOD SECURITY AND DISINFORMATION

The issue of food security in the context of war is known and discussed among others (Maksymowicz, 2022) when experts warned about possible activities that may occur in this area from a biological and informational point of view. The Polish economy is largely based on food production and processing –approximately half of which Poland exports for around 50 billion EUR, more than 20% of Polish exports (Mielniczyk, 2023). Moreover, experts predicted in October of 2022 that the pre-harvest season of 2023 would be dangerous in the form of agricultural protests in Poland and food security will be used by national and international actors (Jarynowski, 2023c). Not only the production chain can be attacked by the Russian Federation, but the EU’s “soft underbelly” is the tensions between food producers and other stakeholders of the system (e.g. the movement to cope with the climate change crisis).

While analysing Polish media (Jarynowski et al., 2023) we were able to identify the course and characteristics of the impact on Polish society in the area of food security and, more broadly, biological negationism/denialism. Increased interest in this topic at the beginning of 2023 was probably caused by the failure of the disinformation campaign regarding the so-called Ukrainian biolabs and infectious diseases transmitted by immigrants. However, it was possible mostly due to the questionable decisions of the ministers of agriculture in the region, mainly in Poland (Radziejewski, 2023).

### PROLOGUE TO THE CRISIS

In order to briefly explain the context of the current crisis, it is necessary to go back to the end of the summer 2022, when it was already known that world hunger, would not be particularly severe this season due to above-average harvests in Europe and North America and at least partial clearing of the Odessa corridor for the export from Ukraine. The sociological context (Gorlach & Foryś, 2023) also seems to be of interest in this case, because the period shortly before the outbreak of the full-scale war near the Polish eastern border indicates a change in the type of agricultural movements. Just as the earlier protests were of an economic nature and concerning the access to the means of production, now animal breeders are demanding political agency in the matter of the so-called “5 acts for Animals” (Jarynowski et al., 2022) or the Green Deal (Barreiro Hurlé et al., 2021).

The problem of dis(mis)-information appearing in the public sphere about food, and especially animal husbandry and welfare in Poland, has been noticed as

a challenge for the agri-food industry and the so called One Health's inspections. It should be emphasised here that it is difficult to analyse food security on the Internet without looking from the perspective of the war in Ukraine and Poland's responsibility for providing food for Europe and the world. Poland has, as was said earlier, a very large food producer. Nonetheless it is important not to close our eyes to the danger of malnutrition or starvation in the countries of North Africa or the Middle East due to war and inability to supply. In the media domain, the biological aspects of food are shown in a biased way, blaming (AgricultureMinistry, 2023) the Polish breeding industry for repeated unreliability and manipulation. Intensity of dis(mis)-information (AgricultureMinistry, 2023) concerning agricultural products (not only pesticides in grain discussed in this article, but also GMO, Salmonella or antibiotics in meat) has increased since Russia's full-scale aggression against Ukraine. Food security in a broad context may become a theatre of hostile actions directed against the Polish state and its allies. It is of national and international concern from microbiological and epidemiological points of view on biosafety and biosecurity concepts (Bielecka-Oder, 2019). Therefore, one should consider the risk of quasi-war activities of a hybrid nature in the narrow sense, e.g. in the form of contamination of the food production process (Kędzierski, 2022), but above all in the area of fueling social moods.

At this point, however, it is necessary to separate the layer of the economic problem of Polish farmers from polarising information activities (not necessarily of Russian provenance). In the following text, we focus only on the media coverage in the context of food security. In addition, it should be emphasised that it was the period of Orthodox Easter (April 14-17), which on the one hand explained the slowdown of negotiations on the Ukrainian side, but also Russian propaganda (Marek, 2023) significantly limited disinformation activities in general regarding Poland or Eastern Europe that time.

Here are two fundamental questions to answer in this article:

- Was the peak of interest in food security in NATO and EU countries bordering Ukraine detectable and foreseeable?
- Can fueling the topic of "poisoned grain" be a part of hybrid war striking at the biological integrity of the region?

### **TECHNICAL AND FOOD GRAIN AND PHYTOSANITARY CONTROL**

For the sake of order, it is good to systematise issues related to the functioning of the biological supervision system of goods in the food production chain. First of all, we need to distinguish between grain imports from Ukraine (the so-called technical grain issue) and other food products. The problem with technical grain (i.e. a special commercial category aimed at facilitating transit through the territory of the EU) is the lack of control by the sanitary and veterinary inspection, which applies to food and feed grain. Technical grain is subject only to a small Plant Protection Inspection and a Commercial Inspection without big multidisciplinary (to detect biological contamination) laboratories. Meanwhile, other food products(non-grain ) are subject to appropriate inspections, although some controls have been removed from the com-

petence of border inspectors and transferred to the interior of the country to speed up transport. We know that the grain transported to Poland without proper control technically turned – under unknown circumstances – into consumption and, above all, fodder (which will probably become the subject of the Supreme Audit Office’s inspection and prosecutor’s office). However, it is worth making the reader aware that the real introduction of cereals that do not meet EU standards for consumption is difficult, because laboratory and organoleptic tests are carried out at the level of cereal plants and processing stages. Therefore, on a massive scale, there is no possibility of introducing food that does not meet EU standards. Especially if significant irregularities are detected, a warning will be issued quickly in the RASFF system. There are already some incidents after Russia’s full-scale invasion on Ukraine when the quality of feed in Poland was undermined by animal rights activists, despite the fact that no irregularities in bio-chemical parameters were detected (Tyg\_Rol, 2022). Thanks to research sponsored by the government programme “Polish Meat” (MF, 2023), there are some clues how these campaigns may look like (e.g. driving anxiety about safety and moral dissonance about the process of food production among young mothers in the context of milk).

It should be noted that Polish-Ukrainian agreement announced on 18.04 (entered into force on 21.04) (Molenda, 2023) allowing the transit of food through the territory of Poland was provided as well as EU level regulations (acting into 15.09) were signed. This is a similar solution (from the technical point of view) to the rules in force in other EU countries bordering Ukraine, such as Slovakia and Hungary (although diplomatically Poland presented itself the worst, because it was the only country that closed its borders completely (Radziejewski, 2023)).

### MATERIAL AND METHODS

The tools Brand24, EventRegistry, Google Trends and the academic API of Twitter were used to collect data. The study uses a mixed method approach to analyse the discussion and discourse regarding biological aspects of Ukrainian grain. In “Western world” biological denialism/negationism (Sakowski, 2020) most often manifests itself in relation to the occurrence of biological evolution, broadly understood food safety, the use of plant protection products or antibiotics in breeding, genetically modified organisms, the effectiveness and safety of vaccinations, the impact of obesity on health, the existence of biological sex, the effectiveness of chemotherapy and radiotherapy in oncological treatment, the existence of HIV and AIDS, non-pharmacological strategies for combating COVID-19, pests (e.g. bark beetle) and epizootics (ASF). Social media, due to the recipient/sender interaction and bottom-up narrative formulation, are therefore a priority from the perspective of information security (Baraniuk, 2023) because they affect its particular domains: physical - the dynamics of formal and informal social networks; information - through access to sharing information of users and cognitive - the dynamics of information bubbles.

To thoroughly understand the problem in Poland and in the Region, the following methodology was used:

- Time series analysis (trend and sentiment) of existing traditional and social media sources using real-time listening methods such as EventRegistry, Brand24, Api Twitter, Google trends in the period 8-18.04.2023 on the phrases “poisoned grain”, “pesticides” and “food security” in Poland;
- In-depth quantitative analysis (thematic, social network and sociolinguistic analysis) of the material 01.04-31.05.2023 with the Brand24 on the phrases “poisoned grain”, “pesticides” and ‘food security’ in Poland;
- Comparative analysis of data from Twitter and Google trends in April was used in the context of pesticides in cereals in the Central European region only.

## RESULTS

### Listening to real-time media at the peak of the crisis

Let’s look *in statu nascendi* at the course of interest in the phrases “food security”, “poisoned grain” or “pesticides” in the Polish Internet in the context of food in April 2023 till the climax of attention.

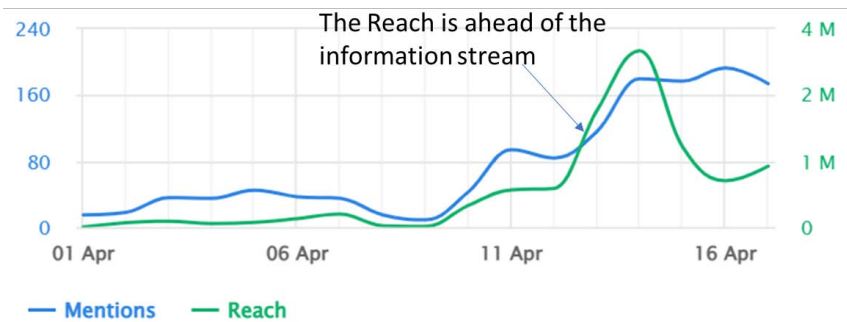


Fig. 1. Course of interest in cereal and food security in social and traditional media. Reach peaked unnaturally around April 14, 2023. Source: own research with Brand24.

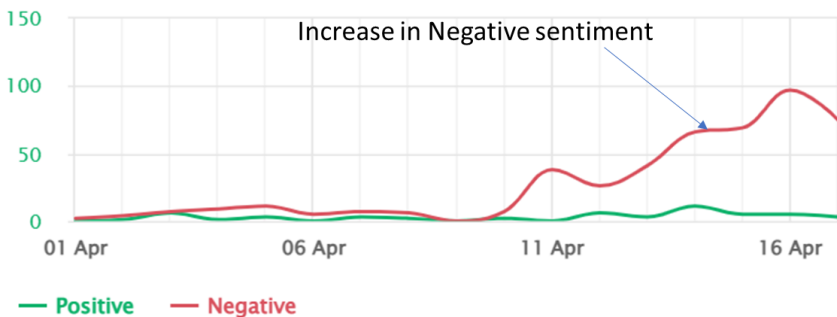


Fig. 2. Emotions in social and traditional media. Strong share of emotions with accumulation on April 14 and 16. Source: Own research with Brand24

The situation evolved rapidly and the topic quickly gained very large ranges around April 14, 2023 which then returned to the starting level on April 16 [Fig. 1]. Therefore, the involvement of bots, troll farms and agents of influence and other resonance tools in promoting the threat can be suspected. Analytics had also noticed suspicious movements in the Polish infosphere around April 13 (Piekarski, 2023) related to security and counterintelligence, which could suggest preparing for action by foreign intelligence.

Due to the concentration on biological topics, negative emotions definitely dominate. However, for example (April 8-13) before the peak of interest, we observed increases in the intensity of joy and trust due to comments favorable to the protesting farmers (a well-known phenomenon of a sense of community (Jarynowski et al., 2022)).

A particular concentration of negative emotions can be seen on April 14 [Fig. 2], just before the express closure of borders for many food products from Ukraine to Poland, and again on April 16. The regulation on this matter was published in Journal of Laws (Import Ban, 2023) before midnight on April 15, resulting in a ban on imports of grain, etc. from Ukraine on the day of the announcement. This caused a lot of chaos, incl. border guards and other inspectors who had to interpret the meaning of the Regulation on an ad hoc basis (e.g. decide what is a commercial commodity and what can be considered as food for the personal use of border crossing persons).

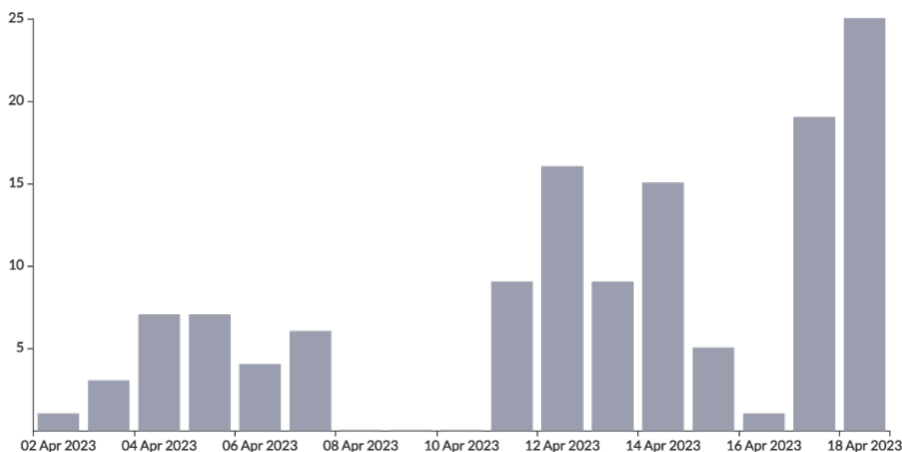


Fig. 3. The interest (daily number of news) in grain food security in traditional media in Polish. Daily no. of news.

Source: own research with EventRegistry.

The discourse surrounding this situation is strongly anti-government, dominated by hashtags: #aferypis and #pisbolszewia. Among the active actors involved in promoting the topic, are among others Twitter users such as Piotr Panasiuk, or YouTube influencers such as Krzysztof Woźniak, whose narrative - intention-

ally or not - coincides with the message of Russian propaganda. However main Polish electronic media such as TVN24.pl, Money.pl and RMF24.pl had the greatest influence on shaping the discourse. The main stakeholders, i.e. farmers, do not actually appear in the discourse (apart from single mentions by AgroUnia and Michał Kołodziejczyk). There are no other representatives of agricultural protests at all, because they very rarely reach for arguments related to food safety and much more often they invoke economic, political and dignity-related arguments.

However, the traditional media reacted to the situation (at the peak of April 14-16) with a delay [Fig. 3], which in discourse analysis is a description of a standard situation in the case of an information campaign. It is worth noting, however, that the subject of food contamination (e.g. detection in fodder grain imported from Ukraine in Slovakia (MPSR, 2023) trace amounts of pesticides: Chlorpyrifos banned by the EU), has already appeared in the thematic media on April 11-13, although it had not been picked up by nationwide media with large ranges at that time.

In connection with the above analyses, we can say with a high degree of certainty that the problem of using emotions related to the health risk, associated with imported grain was predictable, and the activities promoting this discourse are also visible. The vulnerability of Polish society to dis/mis/mal-information (Kasprzyk, 2021) however, is high in this respect. Despite the almost 20% share of employment (agriculture and food processing is already 15%) in the production and services with biological materials, the biological competences of Poles are lower than the European average (Eurobarometer, 2022) in terms of one health. This creates an opportunity to exploit the vulnerability of Polish society in this area.

### **International situation in the region**

The Polish infosphere followed Hungary (which suggests being “infected” with misinformation) [Fig. 4]; which may be surprising, the Slovak infosphere in social media did not react despite the high traffic in traditional media. Only Poland reacted “sharply” to the biological aspects of grain (only pesticides), which means that slightly different mechanisms worked in Poland than in other countries of the region. Polish infosphere had a peak and then a weak interest (in standard bubbles) and Slovakia and Hungary continued the topic for a longer period.

Bulgaria, Hungary, Poland, Romania and Slovakia temporarily banned imports of some Ukrainian agrarian products in spring 2023 due to large quantities of grain ending up in Central Europe. The public opinion in Romania and Bulgaria is the less concern about Ukrainian grains (probably due to lowest rates of flow due to infrastructural and geographical barriers). The highest impact of biological threat is observed in Slovakia [Fig. 4] as the discussion did not die out quickly (and was active for the next months), as it was the case in other countries. A more complicated situation was observed in Hungary, where governmental propaganda agencies were distributing materials on contaminated grains.



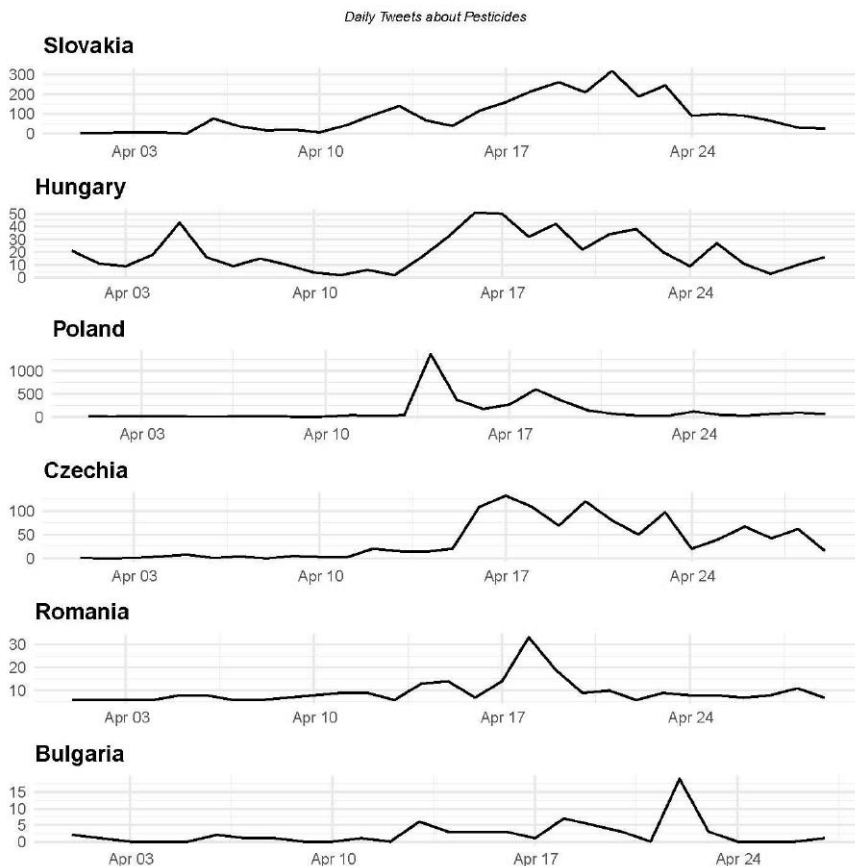


Fig. 4. The course of interest in pesticides on Twitter in the countries of the region with different discourse dynamics.

Source: own research with Twitter API.

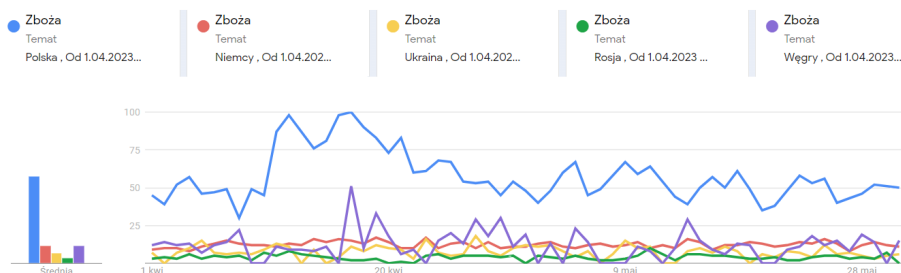


Fig. 5. The course of interest in grain in the Google search engine in the countries of the region (Poland, Germany, Ukraine, Russia, Hungary) with different dynamics of discourse.

Source: own research with Google Trends.

It should be noted that the topic of poisoned grain (or the grain in a wide sense) did not occur in the general populations of either Russia, Ukraine or Western Europe [Fig. 5].

### Wider media context

Apart from the culminating period, which fell on before April 8 and after April 18, we see the activities of the Polish agrarian socio-political movement AgroUnia and its leader (importantly, interviews with Michał Kołodziejczak or materials about AgroUnia’s activities have a greater reach than their own productions). YouTube (over 30 million views) and Facebook (over 15 million views) were the space for the largest discussions (IMIBS, 2023) in the non-climax period (which is related to the low representation of farmers on Twitter or in the mainstream media which dominated in the climax period discussed earlier). Technical grain or grain from Ukraine most often appeared in Google queries in the context of contaminated, poisoned and full of pesticides or mold grain.

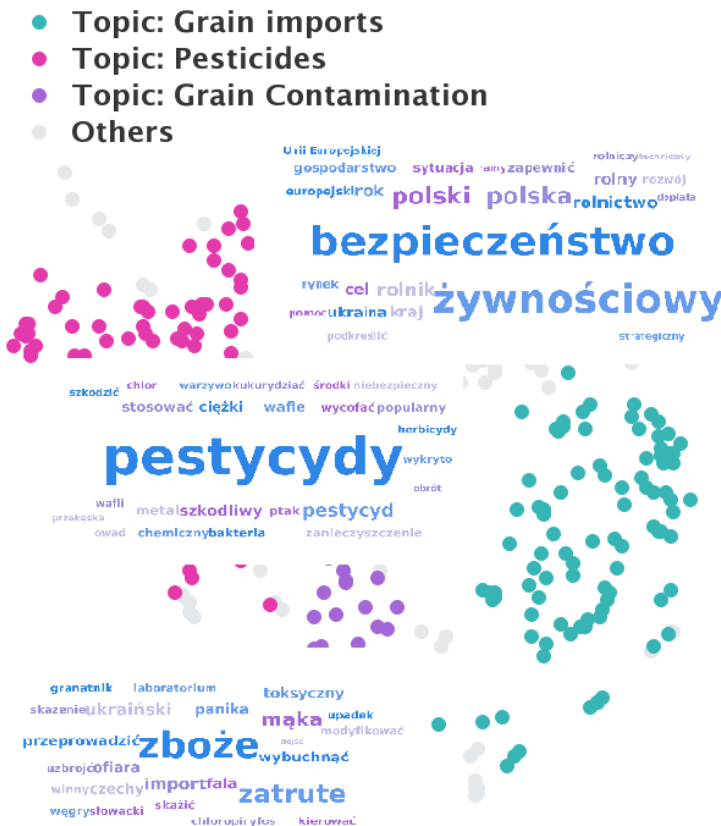


Fig. 6. Thematic Analysis and main keywords in individual topics in the discourse after the climax of the issue (May 2023).

Source: own research with Brand24.

Topic modeling of traditional and social media (collected and processed by Brand24) revealed three main themes [Fig. 6]:

- 1) Imports related issues (i.e. legal classification of material, food security, farmers losses),
- 2) Wider topic of use of pesticides in agriculture (i.e. herbicides, insecticides, heavy metals),
- 3) Grain contamination (i.e. insects/mold in grains, laboratory tests, border control).

Hashtags in social media indicate a strong politicisation of the event by the opposition: #oszukanirolnicy (deceived farmers), #robalewchlebie (bugs in bread), #celadlatrucielei (prison for poisoners), #solidarnarosja (solidarity with Russia), #orgiaafer (orgy of gates), #aferazbozowa (grain gate), #aferyypis (Law and Justice gate), #robaczywypis (bugs in Law and Justice), #pistrujepolaków (Law and Justice is poisoning Poles), #zbozotechniczne (technical grain) i #skazonamaka (contaminated flour).

Concerning narratives “poisoned grain” from Ukraine resonate negatively in the Polish information sphere (IMIBS, 2023) and constitute a fertile ground for dis(mis)-information activities (formulation of a polarising narrative addressed to Poles) and propaganda (content for the Russian internal market and in relation to the Global South).

## DISCUSSION

Real time monitoring of interest in the phrases “food security”, “poisoned grain” or “pesticides” on the Internet is giving us an opportunity to investigate important topics and users and detect abnormalities, which may be used in crisis management. Deeper retrospective analysis allows us to verify some hypothesis and gather more context of the event. It’s necessary to separate the layer of the real problem of Polish farmers from polarising information activities. We focus only on the media coverage in the context of food security. In addition (in comparative analysis of Google trends and Twitter in Region in April), it should be emphasised that it was the period of Orthodox Easter (April 14-17), which on the one hand explained the slowdown of negotiations on the Ukrainian side, but also Russian propaganda relatively limited disinformation activities regarding Poland or Eastern Europe and focused on the issue of Ukrainian grain (including its health values).

### **The phases of the narrative in the time of the climax**

#### **1. Right-wing phase**

April 08-13. There is a problem on which the niche right wing is interested (so a lot of traffic but small reach). Also, around April 13 an attack by bots on Twitter (we have no evidence that it was from the Kremlin), but not on accounts involved in the discourse, but potentially calming the situation. We see a lot of traffic in the Slovak and Hungarian infosphere.

## 2. Peak phase (long ranges)

April 14 (and only on this day). The most popular media take up the topic (the biggest role of TVN24, a Warner Bros. owned news station - several reports on the same day and Money.pl - specifically one article about Slovakia), but celebrity accounts did not follow them either (large negative load and hundreds of likes on Twitter and Instagram). Negative ranges peaked already on April 13, but only on April 14 they peaked for the whole sentiment (because the mainstream media reported the situation rather without much emotion).

## 3. Mixed right-left phase (high traffic, small reach)

Later we have Orthodox holidays - and in Poland on April 15, live with closing the border and going to mass, but there are no more ranges. Naturally (usually) we should also have good ranges (because the social network always has larger ranges at the weekend), but they return to the level before the April 13 as if they couldn't do it without pumping up.

## 4. Commenting Phase

From April 17 other traditional media are switched on.

## 5. Kremlin propaganda phase (for the internal market)

On April 18-19, the Kremlin's official disinformation kicked in, but without any real impact on the Polish infosphere. Entering the infosphere of Bulgaria and Romania.

It should be emphasised that the Kremlin's disinformation campaigns regarding biolabs in Ukraine or mal/mis-information campaigns using infectious diseases in the context of refugees have indicated a lack of efficiency of Kremlin propaganda (Jarynowski, 2023b). Aside from creating fear in March 2022 in the general population, these campaigns got stuck in information bubbles already hostile to Ukrainians and failed to capture the attention of the wider population. However, food security (among the whole repertoire of biological negationisms (Jarynowski, 2023a)) has been identified as an area where the greatest effect can be achieved at the lowest cost and the current mis/mal-information campaign - which probably was not created by the Russians, but only pumped up - turned out to be a success at the tactical level, and time will tell if it is combined with other hybrid warfare activities, even strategic ones.

Apart from the culminating period, both accounts associated with small media and individual profiles as well as public groups with right-wing connotations dominated the discourse. During the culminating period, the situation changed due to the dominance of large media and influencers with diverse political views (full cross-section of the political scene) and the agriculture stakeholders and right-wing activists calmed down (were not visible in the discourse). However, during the peak, the great variety of organisations from the anti-vaccine and anti-sanitary discourses, as well as adjusting anti-Ukrainian messages to the current situational context were observed (as in Baraniuk's research on Russophobia after a full-scale invasion (Baraniuk, 2023)).

## CONCLUSIONS

Activities in the area of information security, in the context of the ongoing war in Ukraine, are mostly a protection of information through special preparation. Disinformation, intoxication (misleading the enemy) in addition to physical security of signal transmission are tasks for the cyber security system created in 2019 in the Polish Ministry of Defense (DKWOC, 2022). The current "National Security Strategy of the Republic of Poland" (Prezydent\_RP, 2020) indicates that the information space is on a par with the classical battlefield in the area of response of civilian and military services. Ensuring the security of the state and citizens in the information space, in the context of actively countering disinformation, is active cooperation with the news media and social media, striving to increase public awareness of the dangers of information manipulation: "through information security education" (Prezydent\_RP, 2020). Moreover, a subject on biological hazards in the context of food security should be introduced in medical and life sciences majors (Jarynowski, 2023c; Wiśniewska, 2023).

Activities aimed at influencing the attitudes of individual people and entire societies have entered the canon of psychological warfare for good. The experience of the past few years shows that recognising threats and taking effective action by counteracts crises and ensures food and information security (Dragović et al., 2019).

The broadly understood grain scandal is primarily a consequence of poor management of the crisis by Polish politicians (Radziejewski, 2023) of enormous internal and external harmfulness (with little short-term benefit for Polish breeders), and this analysis is only a supplement in the biological area. Therefore, Russian spin-doctors cannot be attributed with sole agency in the matter of mis-information, because they use already existing problems and conflicts (e.g. related to the election campaign (Domalewska, 2021)). Polish government has only created a window of opportunity for them, and depending on their goals, it will be ruthlessly used, and the only thing we do not know is at what level (whether deepened internal polarisation and lowering Poland's credibility on the international arena is the end of the campaign (Radziejewski, 2023)). Also, the participation of other internal and external forces affecting the infosphere in the area of biological integrity cannot be ruled out (e.g. SEO services purchased from a marketing agency). In our opinion, however, it is the Kremlin that is trying to take advantage of the existing grain problem with an emphasis on health issues, among others to induce internal polarisation activities and to generate disputes between Poland, Ukraine and the EU. It is also worth looking at the internal narrative (April 17-19) where the Kremlin is trying to convince its own citizens and Russian-speaking Ukrainians that Poland (and other EU countries) dealt a "stab in the back" to Ukraine while being indifferent to the starving Global South (against which information campaigns are already prepared). Thus, in the period of April 17-19, we observed delayed (due to the Orthodox Easter) information activity in Romania and Bulgaria. Hence, we can see the synchronisation of information propagation in Catholic countries on April 11-16 (Slovakia, Hungary and Poland) and in Orthodox countries only after Christmas.

### ANOTHER THREAT ON THE WAY?

However, the timing of this campaign seems not accidental from the point of view of Russia's hybrid warfare. What is puzzling, the lobbyists at DG Agri at the European Commission did not recommend a gradual release of stored grain in Poland in Autumn 2022, when the price on the market was still favorable for farmers. It is worth considering why (we asked this question on the forum in Krynica 2022 (FOOD\_Security, 2022)), but this is not the subject of this study. Polish circles associated with the agricultural industry (especially breeders) postulate that not only Russia may act to the detriment of Poland, but also competition on the international agricultural market (AKSIM, 2022) may also interfere with Polish infosphere. It is worth paying attention to Russia's actions in the Black Sea and to temporarily strengthening food and information security in Europe, because, in accordance with the premises of deer (Dep\_of\_State, 2022), again, something may happen in this area at the turn of Summer/Autumn 2023 (depending on the crop harvest or the situation at the front and upon submission of the article, Black Sea agreement was broken). Moreover, September 15, 2023 marks the end of the EU's ban on grain imports from Ukraine, which was established after Ukrainian grain uncontrollably flooded the Eastern European markets. However, we should probably not expect much movement in this regard until mid-October 2023. The reason is the elections to the Parliament of the Republic of Poland. The situation related to grain from Ukraine should not polarise politicians for one reason: each party cares about the rural electorate. And although this happens to varying degrees, both largest parties in Poland (Law and Justice and Civic Platform) as well as most of smaller parties clearly show that they support maintaining regulations related to the import of Ukrainian grain to Poland. It is therefore possible that due to the low potential to destabilise the political situation in Poland by polarising positions on this matter, possible foreign intelligence agencies will refrain from further "heating up" this topic (in biological aspect only).

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