

## 2022 Final Declaration

The 6th International Biocidal Congress held between 17-20 November 2022 with the cooperation of the Biocidal Occupational and Environmental Health Association, Çukurova University, Ege University, Istanbul Bilgi University and Ufuk University and TİKA, with the contributions and participation of the Ministry of Health, General Directorate of Public Health, the Turkish Medicines and Medical Devices Agency and the Ministry of Agriculture and Forestry, was successfully completed and we would like to thank everyone who contributed to the organization of the congress.

The following key issues were discussed by national and international experts during the congress in light of current developments:

- global and local perspective on pest control,
- efforts to combat pesticide residues and within the scope of the green agreement,
- current legislation and active substance registration system in biocidal products
- sustainable pesticide management,
- product inspections,
- sector problems and solutions,
- global and local approaches to urban pest control,
- disinfection applications,
- good practices in biocidal products in local governments,
- industry-specific new developments in biocidal products,
- integrated pest management and urban health,
- integrated pest management and rural health,
- biocidal product residues in foods,
- current situation in processed goods analysis,
- the effects of biocidal products on ecological life.

Furthermore, a regional cooperation development study in sustainable and integrated pest control was conducted with the participation of representatives from Balkan and Turkish states.

The participants had the opportunity to receive answers to their current problems and questions from competent authorities and experts, as well as to be informed about international biocidal innovations.

Our congress was supported by international institutions and organizations in the field of biocidal, especially the World Health Organization (WHO), Food and Agriculture Organization (FAO), International Association of Rural Health and Medicine (IARM), Confederation of European Pest Management Associations (CEPA).

Within the scope of the congress, 10 sessions, 3 panels, 2 workshops were held, 13 verbal presentations were delivered, and 14 posters were exhibited. Our congress featured 61 speakers and session chairpersons, 18 from abroad and 43 from Turkey. A total of 370 people attended our congress.

During the congress, the issue of biocidal products was addressed from various perspectives, and participants had the opportunity to share their knowledge, experiences, and ideas.

As a result of the discussions held within the scope of the congress, decisions were taken on the following issues and conclusions were drawn:

1.  $\frac{1}{4}$  of the world's diseases are linked to environmental hazards; if these hazards can be controlled, these diseases can be avoided.
2. Pesticides endanger not only the regions where they are used, but the entire world, and although no pesticides were used in the glaciers, pesticide residues were detected even there. It is reported that the effect of pesticides on climate change is 480 times greater than the contribution of CO. As a result, their use has been restricted up to 90% over the years, particularly in some European countries, and these restrictions and regulations are becoming more stringent every year.
3. Creating a sustainable environment is a critical step in disease prevention. Risk reduction for a healthy environment, surveillance studies, strengthening the capacities of national institutions, leadership, and coordination activities are all underway.
4. It is predicted that by 2050, we will need to increase our current food production by 50%. Furthermore, 4 million tons of pesticides are used in agricultural areas around the world each year. Biosecurity strategies and action plans, early warning systems, antibiotic resistance management, and the establishment of a holistic health system are among the FAO's recommendations. Agricultural field studies are conducted in order to reduce the amount of residues and chemicals. In this context, it is important to set international standards and develop cooperation.

5. The European Union Green Deal includes several commitments, such as reducing the risk and use of chemical pesticides by 50 percent by 2030, collecting and recycling waste pesticide containers. In our country, they are sometimes collected and recycled by garbage collectors in an uncontrolled manner, and their use such as in the manufacture of bags in marketplaces and toys for children seriously threatens public health. As a result, it is critical to expand the pilot studies that have been initiated to prevent environmental pollution by collecting waste pesticide containers and to prevent incorrect recycling practices.
6. Because the necessary chemical, biological effectiveness, toxicological, and ecotoxicological tests are not performed on counterfeit and illegal pesticides, and thus the necessary standards are not met, their production is cheaper, and their consumption is higher. While counterfeit and illegal pesticides do not provide the anticipated benefit, they do have serious negative consequences for human, consumer, and environmental health. For these and other reasons, it is reported that the illegal trade of counterfeit and illegal pesticides has become one of the ten most profitable organized crime businesses.
7. Because of the evolving food and environmental standards, Integrated Pest Management, which is a method of combating pests by producing solutions without the use of chemicals and/or chemical products unless absolutely necessary, has grown in popularity. A clean environment for our world should be sought by minimizing the use of chemicals and employing trained-experienced practitioners who adhere to effective safe standards.
8. A holistic adaptation of the Integrated Pest Management approach and alternative pest control methods can help to increase the volume of higher-valued products. Farmers/producers, on the other hand, require evidence-based information, agricultural support services, and risk communication to maintain these methods and make the necessary decisions.
9. Those who live in agricultural production areas, particularly farmers, are more exposed to pesticides during and after application. Many countries require occupational exposure limits and routine health monitoring for pesticide toxicological safety and agricultural worker protection. While risk assessment based on exposure assessment is technically feasible, despite the difficulty and cost, retrospective methods do not truly

"protect" workers, instead emphasizing the importance of implementation procedures' effectiveness.

10. Pesticide hazards have become a major concern as health and safety precautions are disregarded in pesticide use. Because of the associated toxicity, it endangers workers who use it as well as the general exposed population. Pesticide toxicity and its grave consequences are unknown to farmers. Pesticide awareness programs and safe practices must be implemented in a way that results in behavioral change.
11. Persistent organic pollutants (POPs), which are industrial chemical products, deliberately produced or received as a by-product, are used as pesticides in many countries. Our region has a prominent level of pollution in this regard. As a result, these pollutants should be monitored in biological samples of humans, environmental samples, and samples of consumed food, and environmental and human risk assessments should be conducted.
12. The correct and reduced use of pesticides is a global issue that requires a global response. As a result, as stated in the workshop with participants from Balkan countries and Turkish states, it was agreed that it would be appropriate to develop a common platform for uploading regional pesticide information and monitoring potential cooperation opportunities.

Finally;

Particularly issues such as the world's increasing need for food, the fight against public health pests, and the less and safer use of pesticides, which are a part of our lives, has become a critical issue for Ministries, authorized institutions, municipalities, non-governmental organizations, and sales companies.

A congress was held to give them an idea about the future of pest control as a guide to our municipalities, academics, beneficiaries, and businesses on issues such as newly developed alternative methods of combatting, legal regulations, and good practice examples within the scope of the changing viewpoint.

We hope to see you at our upcoming congresses for new developments, concrete steps, beneficial exchanges, and collaborations for a healthier planet and environment.

Organizing Committee