



SOCIEDADE BRASILEIRA
DE BIOSSEGURANÇA
E BIOPROTEÇÃO

SB3 TECHNICAL NOTE 01/2025

Biosafety and Biosecurity in the Context of Bioterrorism and Biosabotage Threats

1. Contextualization and Motivating Fact

On June 3, 2025, the United States Department of Justice publicly announced the arrest of two foreign citizens accused of illegally introducing into the country the fungus *Fusarium graminearum*, a phytopathogenic agent that causes gibberella (also known as ear fusariosis, a fungal disease that affects wheat, causing significant losses in grain productivity and quality), recognized for its potential to be employed as a weapon of agricultural terrorism or sabotage (agroterrorism and agrosabotage).

The investigation conducted by the FBI revealed that the fungus had been smuggled from another country for the purpose of carrying out unauthorized research in a university laboratory in the U.S., exposing specific weaknesses in mechanisms for the control and tracking of biological agents, as well as in the surveillance and prevention of biological risks associated with bioespionage, bioterrorism, and the misuse of dual-use biological agents.

The conduct of unauthorized biological research linked to the illegal trafficking of biological material is serious and concerning, reinforcing the urgency of concrete and coordinated actions by States, regulatory agencies, research institutions, universities, the productive sector, funding and control agencies, and the scientific community itself to systematically address the emerging threats in the field of biosafety and biosecurity — both in the agricultural sector and in human and animal health.

2. SB3 Position

The Brazilian Society for Biosafety and Biosecurity (SB3), as a national technical-scientific reference association with international outreach, expresses its deep concern regarding occurrences that reveal vulnerabilities in the safe management of high-impact and dual-use biological agents. The aforementioned episode, involving imminent risk to agriculture and global food security, should be interpreted as a strategic warning for the formulation and implementation of structured and cross-sectoral public policies, both internationally and at national and state levels, focused on prevention and rapid response — whether in agriculture, human health, animal health, or the environment.

3. Recommendations and Strategic Guidelines

- Urgent formulation and implementation of a National Biosafety and Biosecurity Policy, integrating government institutions, the private sector, and academia in an interinstitutional and intersectoral manner, to ensure effective coordination.



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- Strengthening the training of professionals and institutions in subjects related to biological risk, the protection of strategic assets, and the security of facilities that store and handle dual-use agents.
- Establishment of mandatory institutional conduct and protocols for the national and international movement of biological agents, samples, and genetic materials, with strict control and traceability.
- Creation of a national system for surveillance and response to events involving biosafety and biosecurity, including mechanisms for notification, risk assessment, coordinated response, and public crisis communication.
- Promotion of the establishment of Biosafety Commissions — in the broad sense of the term — and the enhancement of audits (internal and third-party).
- Promotion of investments in laboratory infrastructure, reference networks, and diagnostic and containment facilities capable of detecting and responding to biological threats, including those related to terrorism and sabotage.
- Active engagement of Brazil with international biosafety networks, strengthening its role in multilateral organizations and regimes for the control of biological weapons and sensitive technologies.
- Creation of a technical body, committee, or permanent national authority dedicated to biosafety and biosecurity, encompassing issues related to agriculture, defense, and health.
- Strengthening border control services concerning the movement of biological materials that affect humans, animals, and plants, and that are listed, exotic, or present biological (sanitary or epidemiological) risk.

4. Institutional Commitment

SB3 reaffirms its commitment to promoting a robust, efficient, and ethical biosafety and biosecurity culture, adapted to the critical systems and contemporary challenges of science and global security. We will continue to contribute through technical guidance, specialized training, and proactive dialogue with government bodies, institutions, and international organizations, with the aim of protecting human, animal, plant, and environmental health, as well as safeguarding sustainable development and national sovereignty.

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