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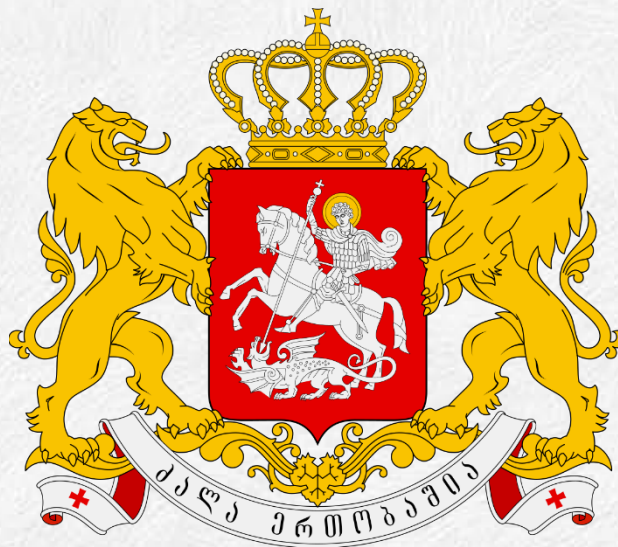
**Successes and Challenges of Implementation of the Convention - Official
Program against Brown Marmorated Stink Bug (BMSB)**

Agenda item 16

**Prepared by Ministry of Environmental Protection and Agriculture of
Georgia**

English only

MINISTRY OF ENVIRONMENTAL PROTECTION AND AGRICULTURE OF GEORGIA



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Official Program against Brown Marmorated Stink Bug (BMSB)

2018

Spread Area and Chronology

BMSB Origin



Japan

Korean Peninsula

South China

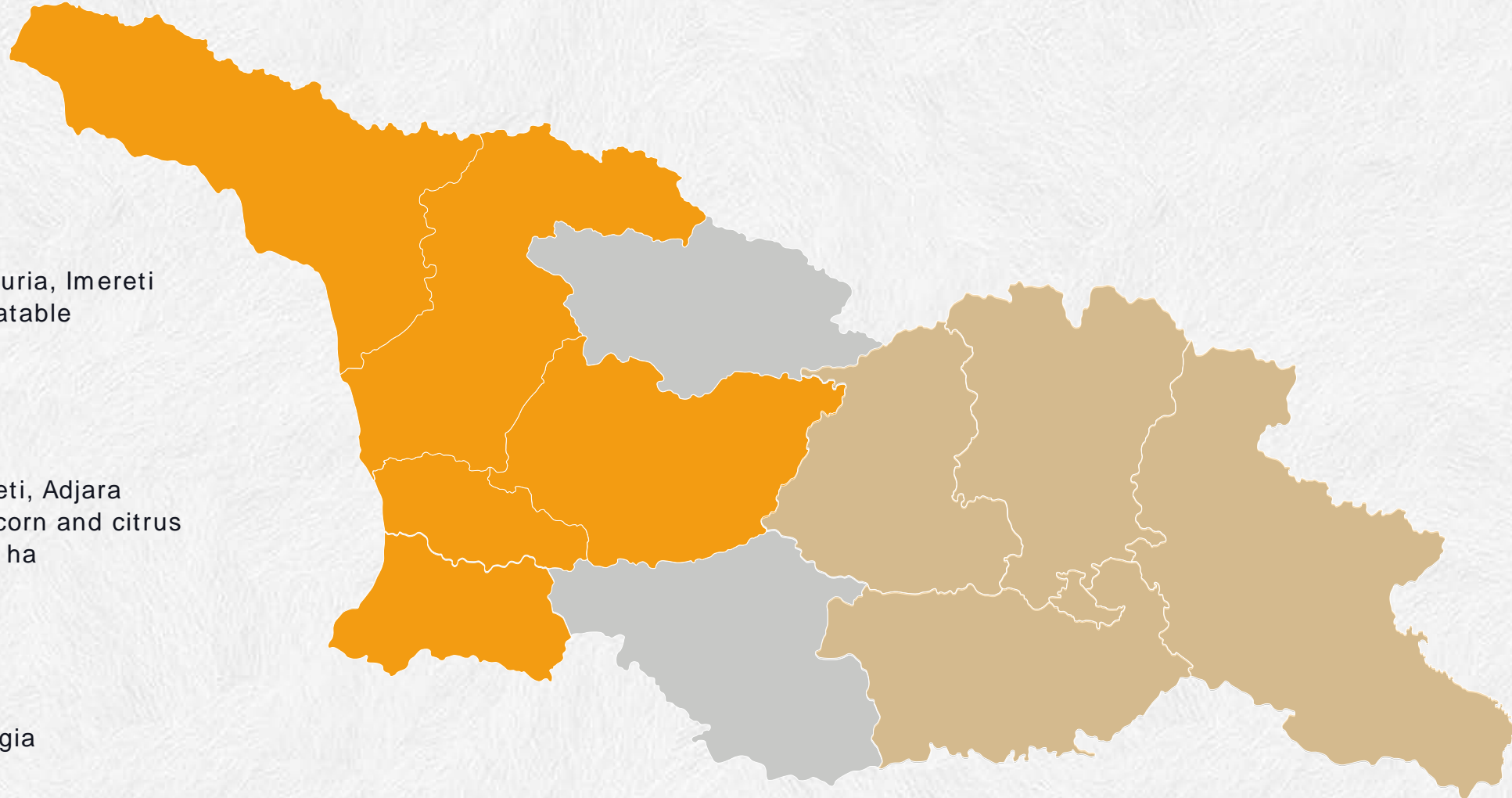
BMSB in these areas has natural enemies and pest population can be kept under control.

Spread in Georgia

Year: 2016
Regions: Abkhazia, Samegrelo, Guria, Imereti
Damage to: Hazelnuts, Corn, Vegetable

Year: 2017
Regions : Samegrelo, Guria, Imereti, Adjara
Damage to: Hazelnuts, partially corn and citrus
Spread Area : more than 110,000 ha

Year: 2018
Spread Expected in: Eastern Georgia



Pest Properties

Polyphagous Insect

Feeds on and damages more than 300 agricultural, decorative and forest plants

Overwintering Sites

Forest edges, shrubberies, tree hollows, buildings and structures, storehouses, stalls boxes....

High Reproductive Capabilities

A single female insect gives approx. 200 progeny during single hatching. In Georgian conditions this occurs at least twice per year.



Travel Distance

Can fly up to 35 km per day. Its movement patterns on agricultural crops and territories is hard to predict.

High Damage

During powerful invasions may damage up to 70% of the crop

Lack of Natural Enemies

No natural enemy has yet been identified in Georgian ecosystem, which would control its population.

Measures Applied in 2016-2017



2016
November

With the involvement of European and American experts, a strategy against BMSB was developed.

Three main directions:

1. Information campaign
2. Monitoring
3. Chemical treatment measures

2017

The Government of Georgia has passed Decree № 588 on “Measures to Be Applied Against Brown Marmorated Stink Bug”. National Food Agency began taking active steps in fighting the pestilence.

Work Performed By National Food Agency in 2017

1

Implementation of BMSB Monitoring System

- 21,000 pheromone traps were placed all across the territory of the country.

2

Chemical Means and Machinery

- Preparations from Bifenthrin group recommended by world's leading entomologists were employed.
- Samegrelo, Guria and Imereti municipalities were given insecticides, spraying machines, means of individual protection; Preparations were sent to Gali region and to the Ministry of Agriculture of Adjara.
- Approximately 230 thousand families in Samegrelo, Guria, Adjara and Imereti received preparations, pheromones, and information materials.
- More than 110 000 ha was treated with tractor and machine sprayers and via aircraft.

3

Information Campaign

- More than 70,000 information brochures distributed;
- Measures and recommendations on fighting BMSB were broadcasted several thousand times via media;
- Web page and social network page of National Food Agency was active.
- 12,000 copies of the special issue of "Our Village", a publication of the Ministry of Agriculture, were printed and distributed in regions.

Main Goal of 2019 Measures Against BMSB

As worldwide practice of fighting BMSB shows us, it is impossible to fully eradicate the pest. But it is possible to control and manage its population, which will put damage to cultivated agricultural plants and harvest in 5-15% range.

The main goal of 2018 measures against BMSB is to reduce and control pest population using less harmful techniques as to minimize damage to cultivated agricultural plants and ensuing economic losses.

Public and Government Role in Measures Against BMSB

Control and minimization of BMSB population (and thus, reduction of damage to agricultural crops and forest plants as well as economic losses) can be achieved only by concerted effort of government, farmers and society as a whole.

Government Role

State performs counter measures against the pest on:

- State-owned territories;
- Private cultivated lands, where there is a necessity to use special machinery.

State ensures public awareness on:

- Use of preparations, mechanical means and machinery, necessary for public to fight the pest themselves;
- Pest biology;
- Safety measures and protection of environment;

Public Role

- Farmers should promptly and in full perform agrotechnical works on their cultivated lands;
- Business organizations should implement in their own line of work recommendations provided by the state;
- People should notify relevant authorities on pest invasion.

Measures Against BMSB: 4 Main Directions

1 Information Campaign 

2 Monitoring System 

3 BMSB Control Measures 

4 Scientific Research Works 

1. Information Campaign

Central Messages

- Need for mutual involvement from both state and population;
- Area of state activity: government applies measures only on state-owned territories and on those cultivated lands, where there is a need to employ special machinery;
- Providing population with advice on fighting pest;

Channels for Spreading

- Television, radio, printed and electronic mass media;
- Social networks;
- Web pages of authorities within the governance of the Ministry and the hotline;
- Providers of agricultural means, farmer service centers, financial institutions connected with agricultural field;
- Direct interaction with public
 - Training for trainers;
 - Trainings and demonstrations for farmers.



2. Monitoring System

Essence

Monitoring system will be used to determine area of BMSB distribution, migration routs and pest intensity; it will provide timely reaction and optimization of response measures.

In high risk zones, forest covers and protected territories, 100,000 units of pheromone traps “attract and kill” were placed.

Additional Outcomes of Monitoring System

- Creation of digital maps and study of pest biology and population in order to devise plans of countering pest in long-term perspective;
- Representation of monitoring results in a unified electronic information system, accessible by public and broadcasting it as a part of information campaign



Along with state, population will be involved in monitoring and their notifications, received by telephone hotline or via information and consultation centres existing in every municipality, will be recorded.

3. BMSB Control Measures

Chemical Means and Machinery for Treating Territories

- Insecticides containing bifenthrin, oil insecticides (thermal fogging technology), pheromone traps for “attract and kill” stations
- Tractor and truck(car) spraying machines
- Special machinery and light aircraft (on unpopulated lands and not on homestead ones)

Customs Control

- Stricter phytosanitary control of plant and nursery import-exports at the border inspection points of Georgia



Expected Outcomes

1 Reduction of damage to agricultural and forest cultivated plants

2 Reduction of losses to individual farmers and country economy

3 Creation of roster (“park”) of special machinery vehicles, that can be used for other agricultural purposes

4 More experience and factual data on pest biology, movement routes and population, that will be reflected in relevant database and used to optimize subsequent countermeasures against the pest;

5 Reduction of damage to plants in parks and squares in urban settlements

Parties Involved in Implementation of the Program

Implementer of the Program

Ministry of Environmental Protection and Agriculture and relevant subunits thereof;

Parties Involved

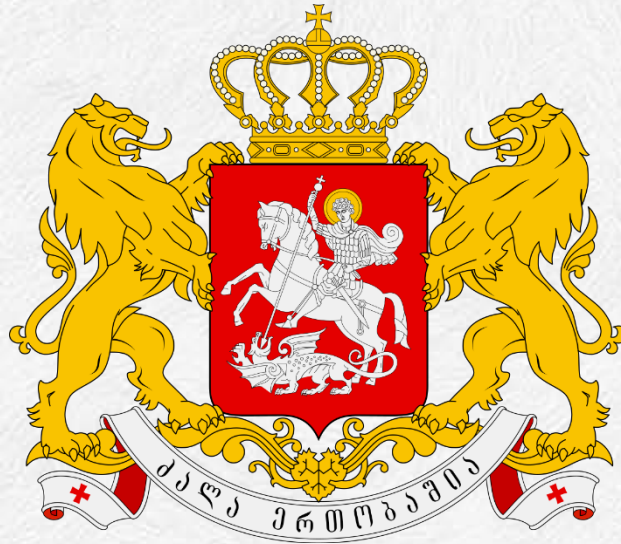
- United States Agency for International Development (USAID) and projects financed by them
- EU Comprehensive Institutional Building Program (EU CIB)
- Representative of Ferrero in Georgia – AgriGeorgia
- Georgian National Academy of Sciences
- Georgian Academy of Agricultural Sciences
- Georgian Agrarian University
- Associations operating in agricultural field

Parties Involved in Implementation of the Program

Inter-Departmental Commission

1. Ministry of Environmental Protection and Agriculture of Georgia
2. Ministry of Regional Development and Infrastructure of Georgia
3. Ministry of Labour, Health and Social Affairs of Georgia
4. Ministry of Economy and Sustainable Development of Georgia
5. Ministry of Internal Affairs of Georgia
6. Ministry of Education and Science of Georgia
7. State Ministry for Reconciliation and Civic Equality of Georgia
8. Government of Autonomous Republic of Adjara
9. Government of Autonomous Republic of Abkhazia
10. Local self-governments
11. Parliament of Georgia
12. Georgian National Academy of Sciences

THANK YOU FOR ATTENTION!



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