

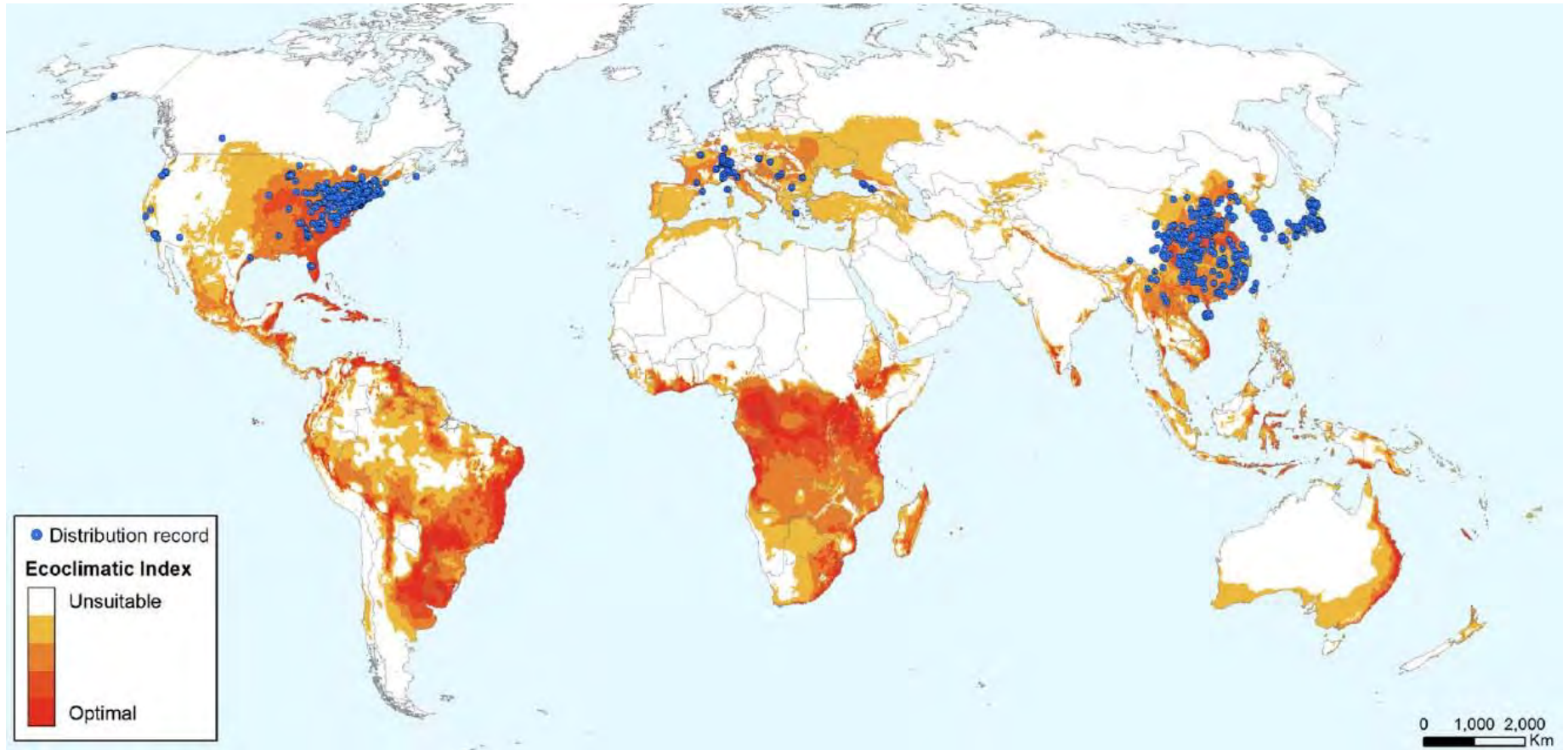
BMSB in Republic of Georgia – Country wide management approach



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Fruit Research and Extension Center, Biglerville, PA
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H. halys potential global distribution

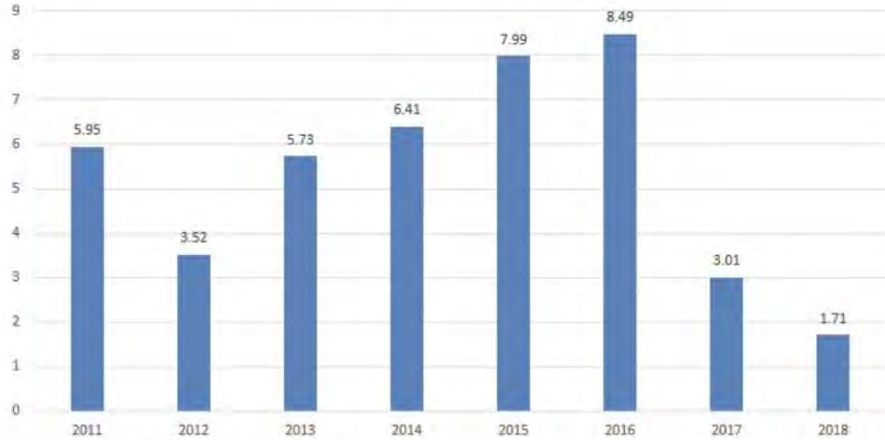


Modelled climate suitability (CLIMEX Ecoclimatic Index) for *Halyomorpha halys*, including reported distribution locations.

(from Kriticos et al. 2017. *J. Pest. Sci.* DOI 10.1007/s10340-017-0869-5)

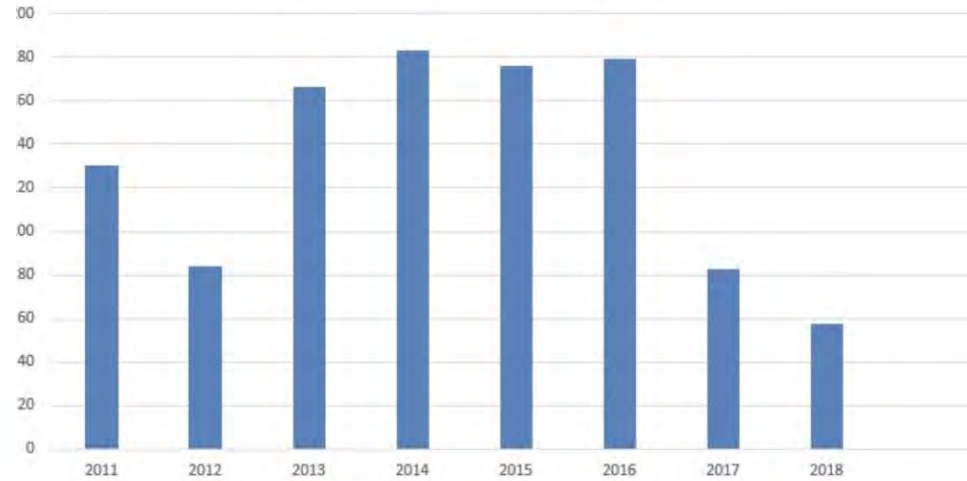
Hazelnuts and Georgian economy

Share of hazelnuts in total exports (per cent)



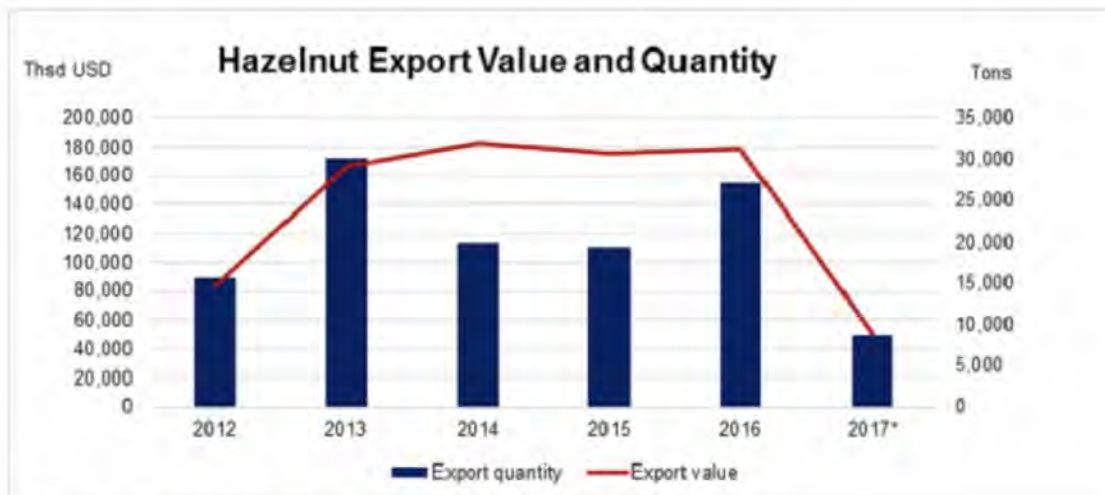
Figures from the National Statistics Office of Georgia.

Export of hazelnuts in millions of US dollars



Figures from the National Statistics Office of Georgia.

In August-November 2019, Georgian hazelnuts were exported to 37 countries including 10 new export destination countries.



The figures are of the Georgian Statistics Agency-Geostat.



Search for solution...



Fall 2016...





USAID
FROM THE AMERICAN PEOPLE



Monitoring and Management Strategy Recommendation for the Brown Marmorated Stink Bug (*Halymorpha halys*)



Results

November 25, 2016

Recommended Strategy

Results

Phase 1: Emergency Plan (Annually, as needed)

- Multi-faceted Education and Public Awareness campaign
- Strategic Response for Small Orchards & Farms
- Customized Pest Management Strategy for Mechanized Orchards & Farms

Phase 2: Long-Term Sustainable Strategy (Ongoing)

- Understand the distribution, biology, and behavior of the BMSB in Georgia.
- Identify options to increase reliance on natural biological control (native and/or introduced).
- Institutionalize local research activities, led by Georgian experts.

Education...



Initial response..



Google Alerts

brown marmorated stink bug

As-it-happens update · March 7, 2018

NEWS

[USAID offers \\$3.5m to help Georgia combat stink bug infestation](#)

Agenda.ge

USAID offers \$3.5m to help Georgia combat stink bug infestation ... The **brown marmorated stink bug**, which damages crops, is widespread in Georgia. ... The United States Agency for International Development (USAID) is helping Georgia combat the country's stink bug infestation problem by offering ...

[US offers \\$3.5m to help Georgia combat stink bug infestation - vestnik kavkaza](#)

Full Coverage

Fläg es írrelevance



Continuous education...



Continuous education...



March '18
Aug '19



Scientific Mission reinforces value of continued support against Brown Marmorated Stink Bug in Georgia



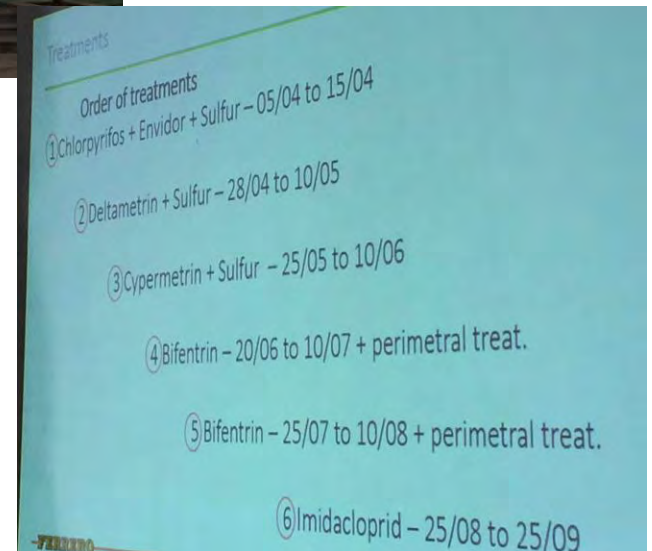
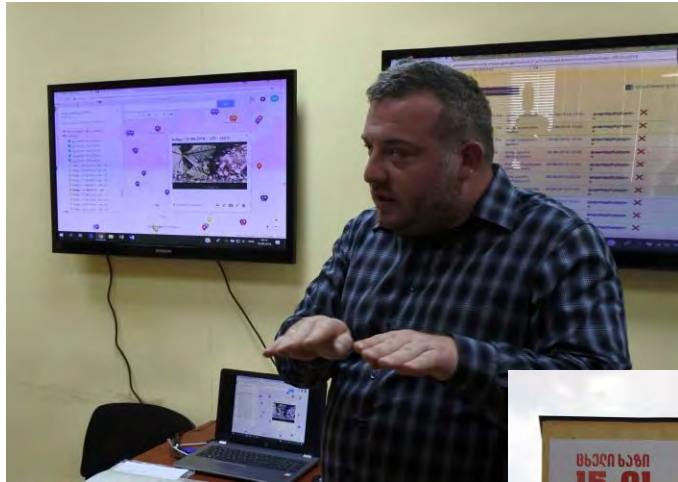
CNFA (Cultivating New Frontiers in Agriculture) Follow
Oct 18, 2019 - 5 min read



Scientific Mission 2019



2018 season...



Spraying alternatives...



Exchange of information...

 Tbilisi, Georgia: International Conference “Brown Marmorated Stink Bug (BMSB)”
by IAPPS

 Food and Agriculture Organization
of the United Nations

 International Plant
Protection Convention

International Conference “Brown Marmorated Stink Bug (BMSB) – Phytosanitary Regulatory Framework”

Posted on Wed, 19 Dec 2018, 09:52

The Ministry of Environmental Protection and Agriculture of Georgia, together with the Georgian National Food Agency, will organize an International Conference on “Brown Marmorated Stink Bug (BMSB) – Phytosanitary Regulatory Framework”, to be held in Tbilisi, Georgia, from 11 to 14 March 2019.

More info: <http://conference.nfa.gov.ge/>

IAPPS | December 21, 2018 at 12:32 am | Categories: [Uncategorized](#) | URL:
<https://wp.me/pWolF-435>

Preliminary laboratory testing of new natural and combined insecticides for the control of BMSB

Report by Prof. Archil Chirakadze et al. 2018



Fighting against BMBS (*Halyomorpha halys*): Experiences, results and prospects

5th and 6th December 2018

Holiday Inn, 1, Twenty-six May Square, Tbilisi,



International Conference “Brown Marmorated Stink Bug (BMSB) – Phytosanitary Regulatory Framework “

Agenda

March 11-14, 2019

29 Rustaveli Avenue, Tbilisi, Georgia

The Biltmore Hotel Tbilisi, Grand Royal Ballroom

March 11, 2019



REAP Rebuilding Resiliency to Agricultural Production

Investigation of the distribution and the level of damage in experimental hazelnut orchard using tools of integrated pest management



Turkish Journal of Zoology
<http://journals.tubitak.gov.tr/zoology/>

Research Article

Turk J Zool
(2018) 42: 617-624
© TÜBİTAK
doi:10.3906/zoo-1802-34

Preliminary data on the biology of brown marmorated stink bug *Halyomorpha halys* (Hemiptera, Pentatomidae) in Georgia

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Mariam MACHARASHVILI³, Sopho KHUTSISHVILI³, Salome SHENGELAIA³

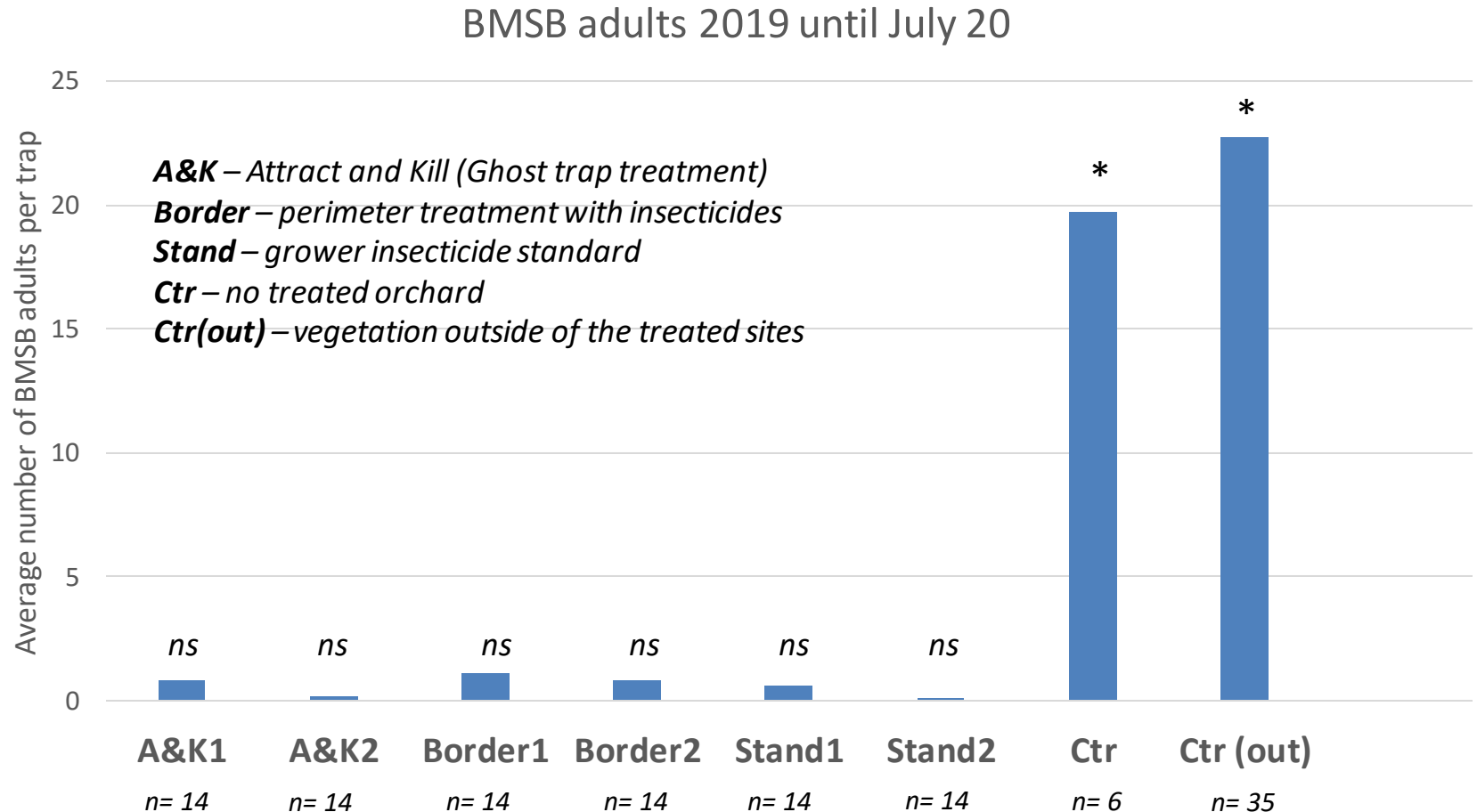
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BMSB management trial 2019 season

Data from the on-going field trials by **Drs. Maka Murvanidze and Nino Inasaridze**



ANOVA, LSD, $p \leq 0.05$, \sqrt{x} transformation

Going forward...



Cooperators...



იფიცილი
ინფეაუც
იდეოადა



GEORGIAN
HAZELNUT
GROWERS
ASSOCIATION



UNIMORE

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MODENA E REGGIO EMILIA



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10

YEARS

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