

OHS Education in Agriculture

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- Risks and hazards
- Education of agricultural workers and experts
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Introduction

- Agriculture-first organized human activity
- Serbian statistics:
 - 500.000 workers officially employed in agriculture
 - 40% of Serbian population (≈ 2.8 million) living in rural areas
 - Since the most of Serbian agriculture is based on individual properties it might be estimated that at least one million inhabitants are involved in agricultural activities
- Inadequate access to health care services of the Rural population in Serbia

DE
MORBIS
ARTIFICUM
DIATRIBA

Mutinæ olim edita; nunc accedit Supplementum
ejusdem argumenti, ac Dissertatio de Sacrarum
Virginum Valetudine tuenda.

AUCTORE
BERNARDINO RAMAZZINI

In Patavino Gymnasio Practicæ Medicinæ
Professore Primario.



VENETIIS,
MDCCXLIII.

Apud JOSEPHUM CORONA,
In Via Mercatoria, sub Signo Præmii.
SUPERIORUM PERMISSU.

Health of agricultural workers

- Ample data on occupational risks and hazards in agriculture is available
- BUT...
- Modern agricultural equipment improves safety
- BUT...

Health of agricultural workers

- The most sophisticated and modern agricultural equipment is expensive and unavailable
- Even the most sophisticated equipment presents a risk of injury when the operator is not properly trained
- Injuries and long term-low level exposure might cause significant health issues

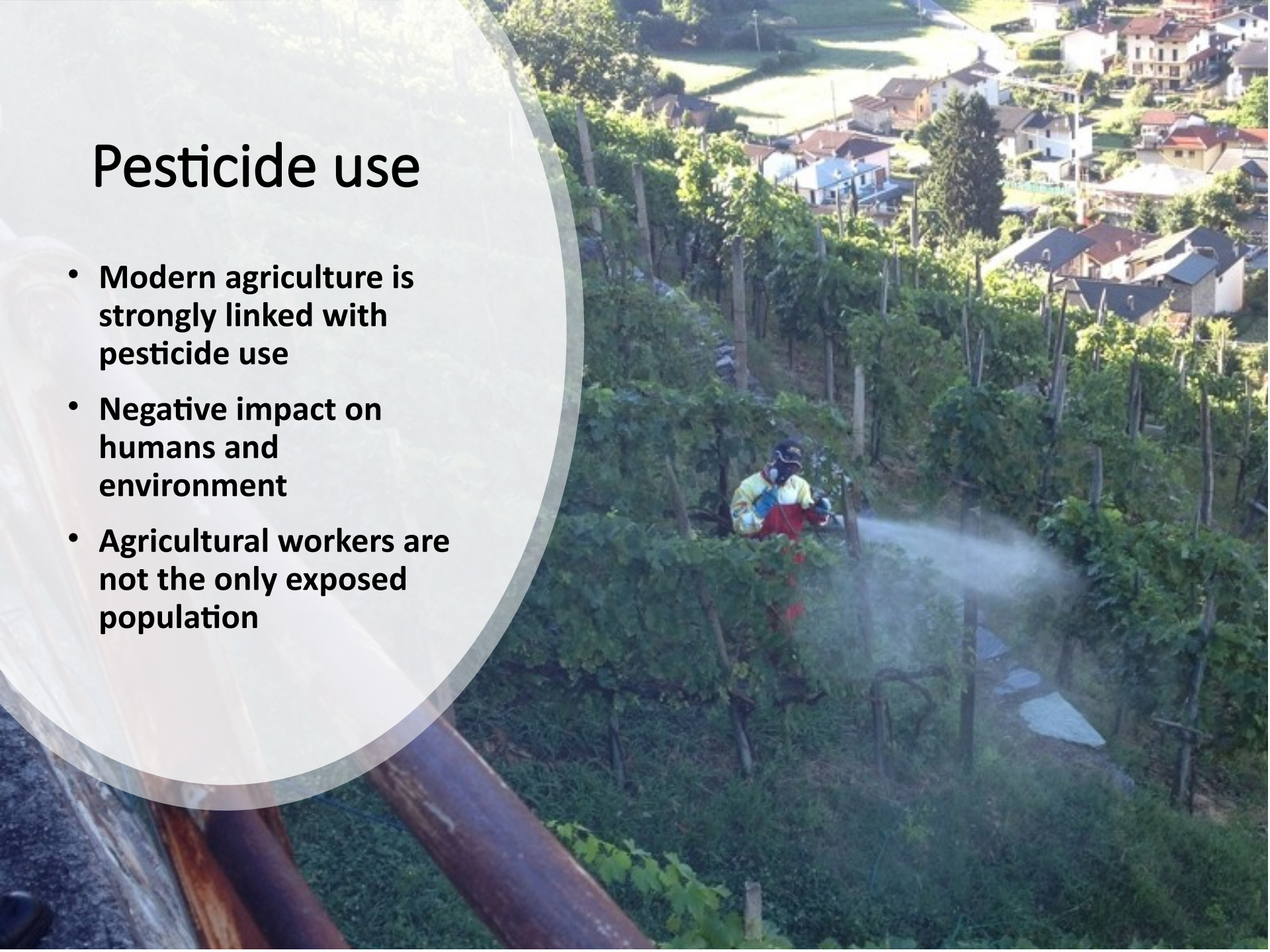
A close-up photograph of a skin lesion, possibly a mole or a skin cancer, showing a dark brown, irregularly shaped area with a textured, almost crystalline appearance. The lesion is set against a background of normal, light-colored skin. A large white circle is overlaid on the left side of the image, containing text.


Work in the field

- Cold
- Heat
- Humidity
- Solar (UV+IC) radiation

Pesticide use

- **Modern agriculture is strongly linked with pesticide use**
- **Negative impact on humans and environment**
- **Agricultural workers are not the only exposed population**



A photograph of a person wearing a blue jacket and a white hat operating a tractor in a field. The tractor is pulling a red implement. The background shows a line of trees. A semi-transparent circular overlay is positioned on the left side of the image, containing text.

Agricultural machinery

- **Sophisticated and modern agriculture equipment is expensive and unavailable**
- **“Classical” ones are dangerous**
 - **Noise**
 - **Vibration**
 - **Injuries**

Heavy physical workload

- Overtime
- Night shifts
- Various jobs during a working day
- Heavy weight
- Poor ergonomics



Biological hazards

- **Permanent contact with insects and animals**
- **Poor hygiene**
- **Drinking water?**



Sensitive groups

- Child labour
- Women in the reproductive period
- Pregnant women
- Elderly population



STEFAN TOTIĆ (7),

najmlađi srpski kasapin, u "Nedeljnom telegrafu" p svojoj strasti mesara i ugostitelja:

"Više volim kafanu nego 'Moćne rendžere'. A više vol koljem i obrađujem prasiće nego da gledam crtaće. volim da čitam kuvar nego stripove. Najveći bakšiš da Šaban Šaulić – po sto dinara! Služim ga pečenjem, v spremam, čistim mušemu, donosim mu hleb. Najviš

OHS Education of agricultural experts in Serbia

- Secondary agricultural schools in Serbia: 22
 - OHS does not exist as a module
- OHS related statements in educational goals
 - Implementation of safe and healthy procedures in agriculture – 4 schools
- OHS related topics
 - Ecology and environmental protection – 6 schools
- Not mentioning OHS – 12 schools

OHS Education of agricultural experts in Serbia

- Agricultural High Schools in Serbia: 2
 - Only one provides OHS related teaching
 - Environmental protection
 - Noise protection

OHS Education of agricultural experts in Serbia

- Faculties providing agriculture related programs in Serbia:5+1
- OHS related teaching
 - Environmental protection (elective) - Belgrade
 - Environmental protection (master) - Belgrade
 - Ecotoxicology and environmental protection - Novi Sad
 - Agriculture and environmental protection - Sremska Kamenica
 - Agroecology and environmental protection - Bačka Topola
 - Sports medicine (?) - Faculty of veterinary medicine-Belgrade

OHS Education of agricultural experts in Serbia

- In the Serbian educational system of agricultural workers training on Occupational Health and Safety almost does not exist
- Solving health issues and prevention in a numerous population (more than 1,000,000 people) represents a challenge, especially taking into account the lack of institutional monitoring

A way forward

- Introduction of OHS education in core curriculum of all educational programs for agricultural workers
- Secondary schools: at least one module - Basics of OHS in agriculture
- University level: Basics of OHS in agriculture + Management of environmental and occupational health and safety

Conclusion

- Considering a number of people involved and their production agriculture is an important sector of Serbian economy
- Health risks of agricultural workers, even if well known for decades, are not properly addressed in agricultural workers' education
- Improvement of OHS education of agricultural workers might significantly reduce occupational injuries and diseases in this group almost without economic investments
- Since this is strategic activity first results might be obvious in next decades, but delaying it will result in new occupational injuries and diseases