

The use of molecular markers for plant variety register and identification: a vision from INASE Argentina

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Problems to solve

Great number of variety applications

Origin and use of seed

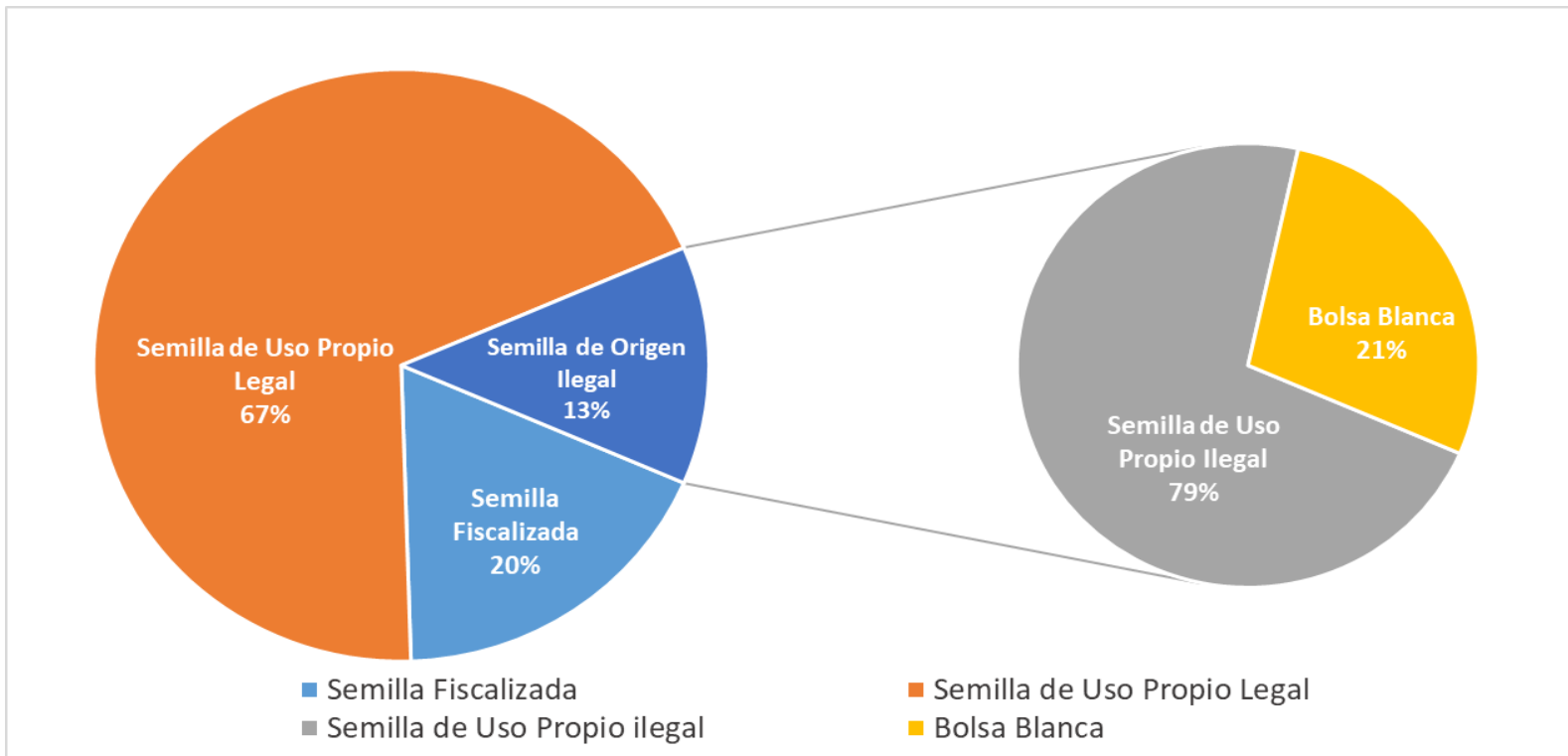
Great number of variety applications



Origin and use of seed

Legal/Illegal use of seed (2016/17)

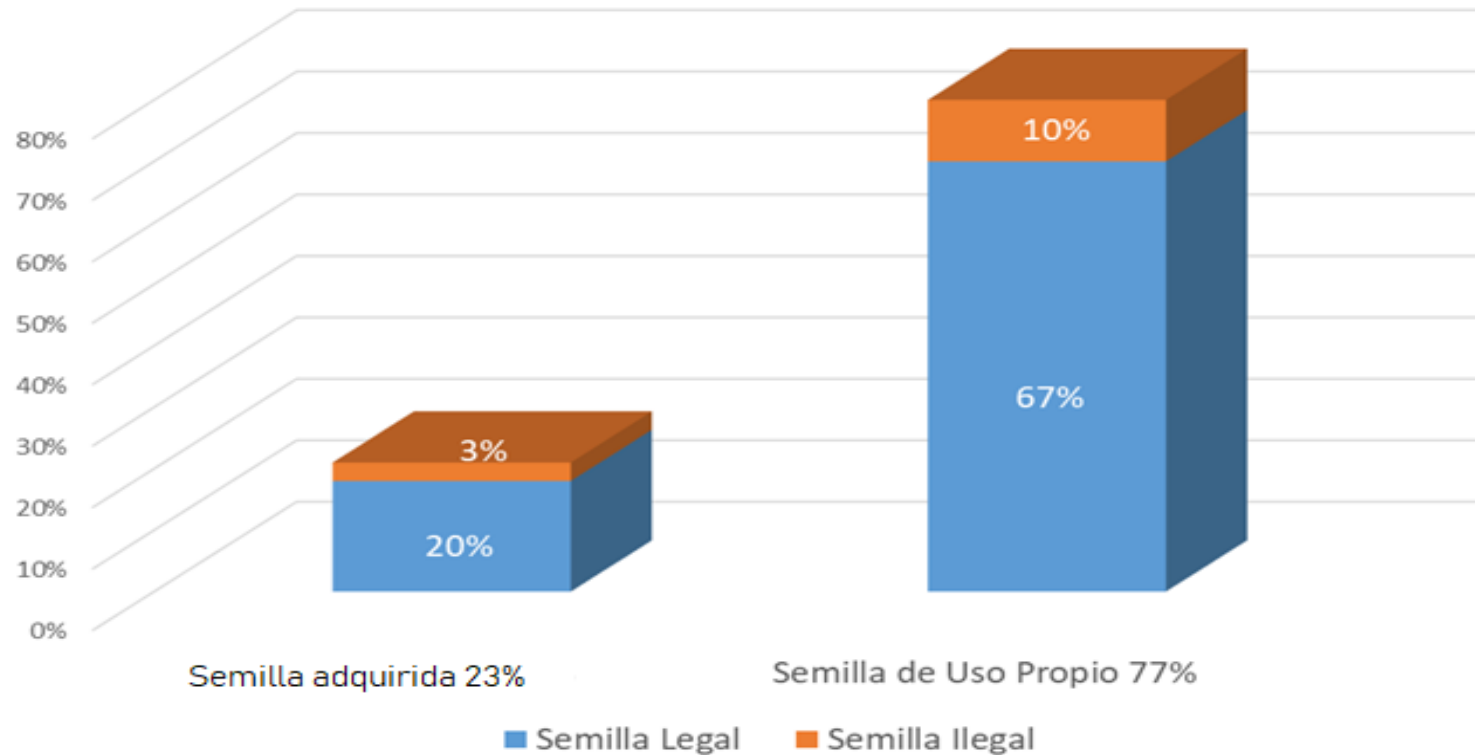
Surface according to origin



Origin and use of seed

Legal/Illegal use of seed (2016/17)

Surface according to origin



Development of molecular makers

Public/Private Project to solve common problems



Species specific Ad-hoc Working Groups to consider the use of MM for these two purposes



Development of molecular makers

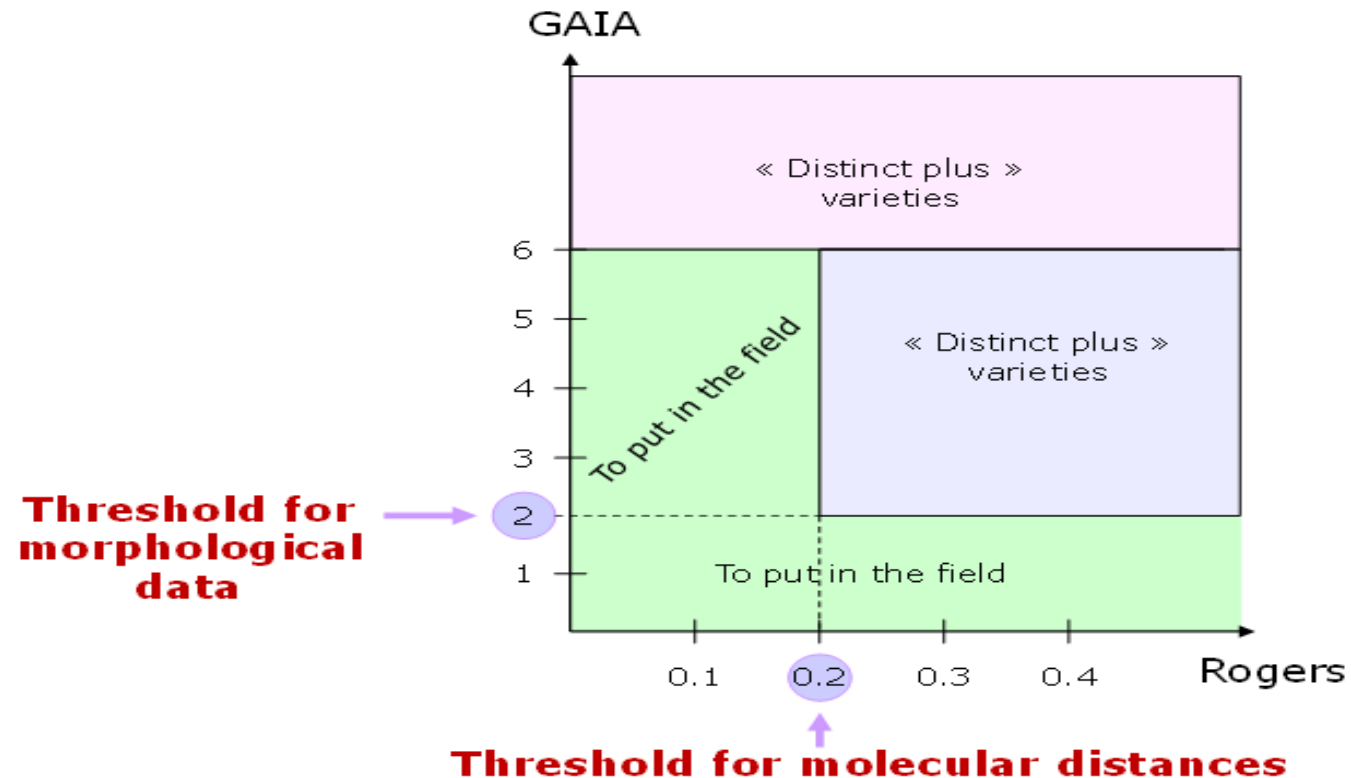
OBJETIVES

- A) Develop effective instruments based on MM to have a more efficient DUS examination (subset Y)
- B) Develop a subset of MM for variety identification to be used in seed trade control and PBR enforcement (subset Z)

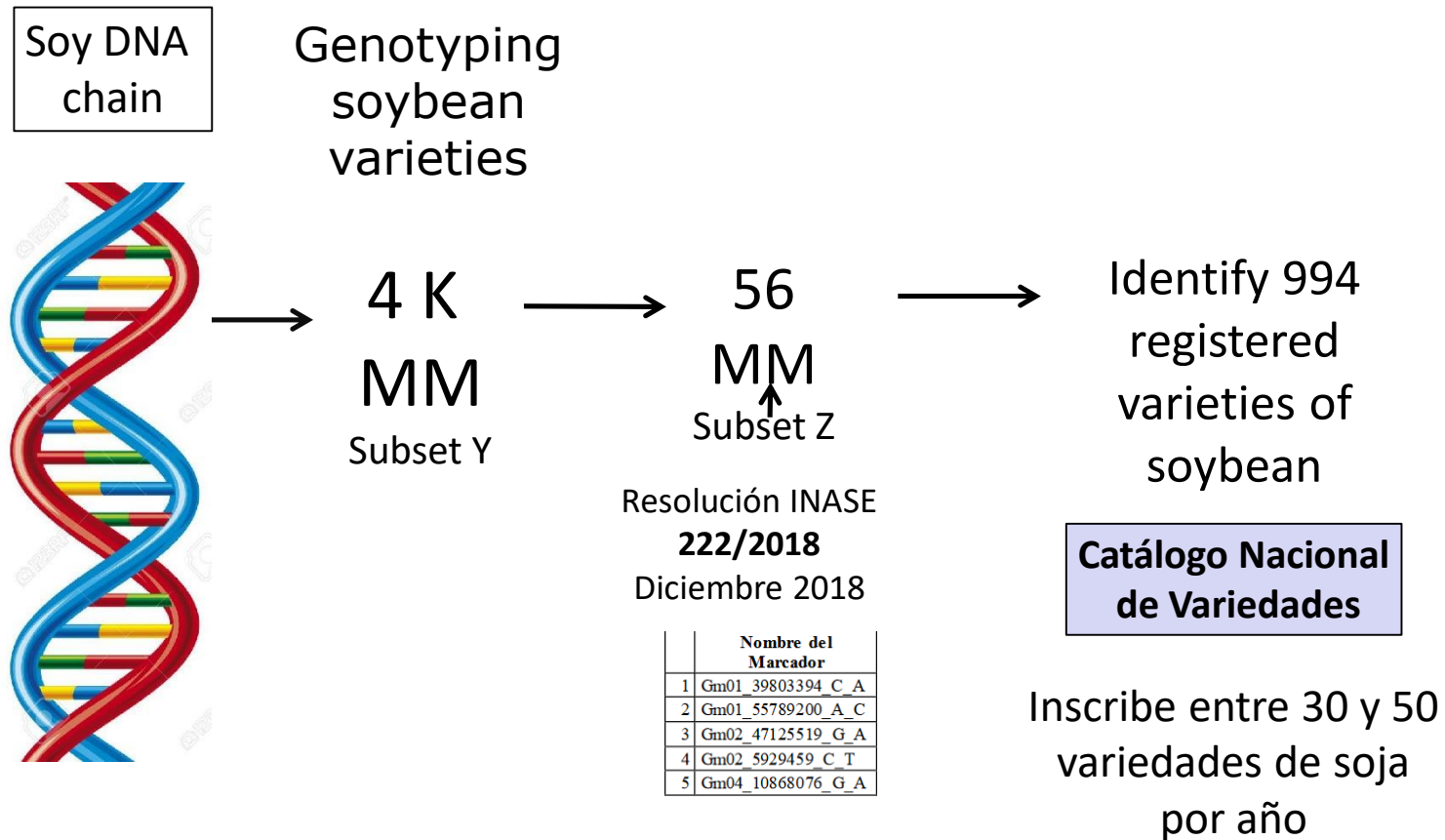
Development of molecular makers

Model 2 combine phenotypic and molecular distances for the management of reference collections

(Based on the maize model from GEVES)



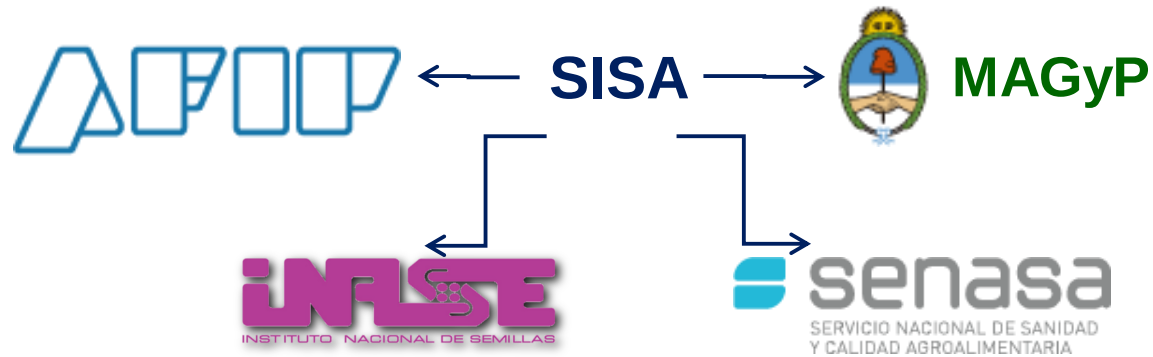
Development of molecular makers



Control system of the use of seed

SISA

SISTEMA DE INFORMACION SIMPLIFICADO AGRICOLA
(Simplified Agricultural Information System)



Control system of the use of seed

SISA

SISTEMA DE INFORMACION SIMPLIFICADO AGRICOLA
(Simplified Agricultural Information System)

Simpler
system for
presenting
information

Against illegal seed market

Farm saved seed according to law

Share information
between several
governmental
agencies

Bigger and
better
information

Control system of the use of seed

3 data sources



FUTURE

More crops: soybean, wheat, cotton, + peas, rice, peanut

Explore potential benefits of the use of MM at regional level

Other technologies

Thank you

