

African Ministerial Conference 2015: Intellectual Property (IP) for an Emerging Africa

SESSION III

PROMOTING RESEARCH AND DEVELOPMENT IN FOOD AND AGRICULTURE

Promoting New Plant Varieties for Enhanced Agricultural Productivity and Food Security

Peter Button
Vice Secretary-General, UPOV

Dakar, Republic of Senegal, November 3 to 5, 2015

Plant breeding and plant variety protection: in whose interest?



What we eat

WH...EAT

WHEAT

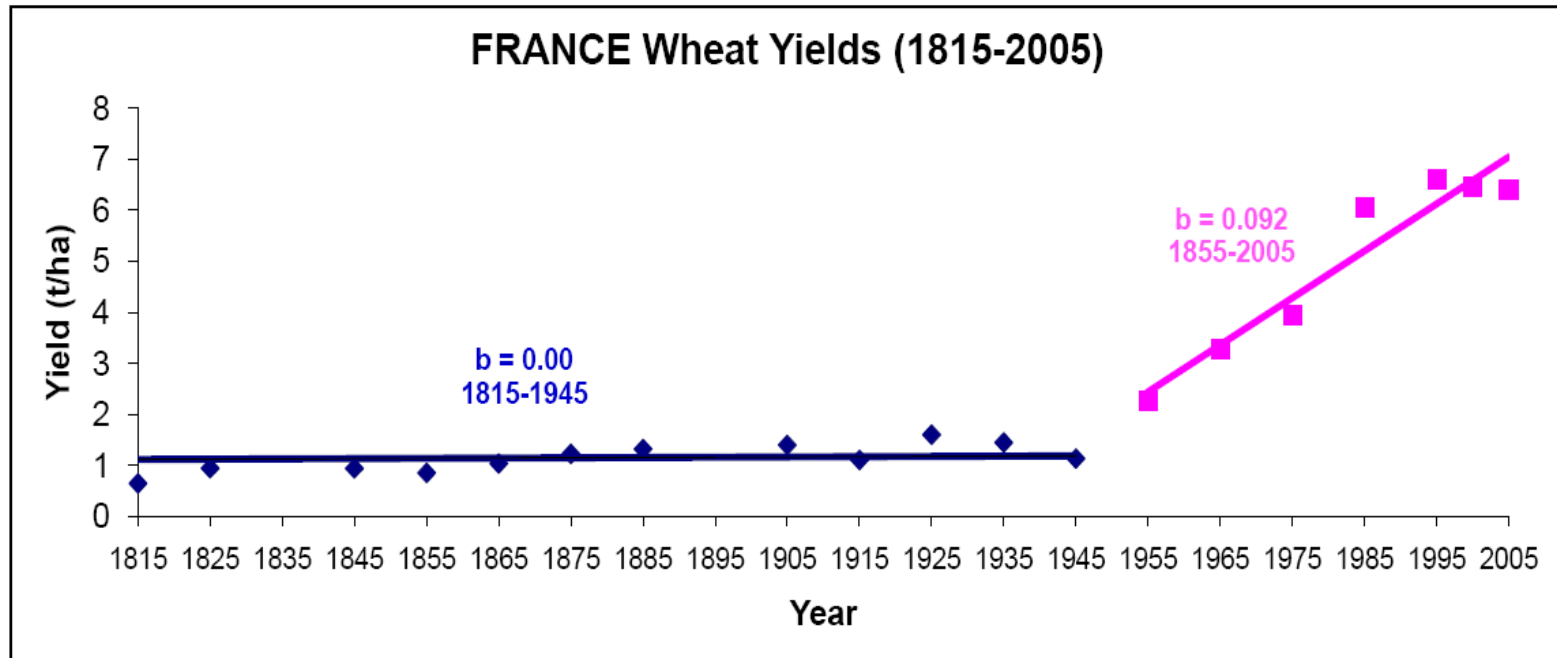




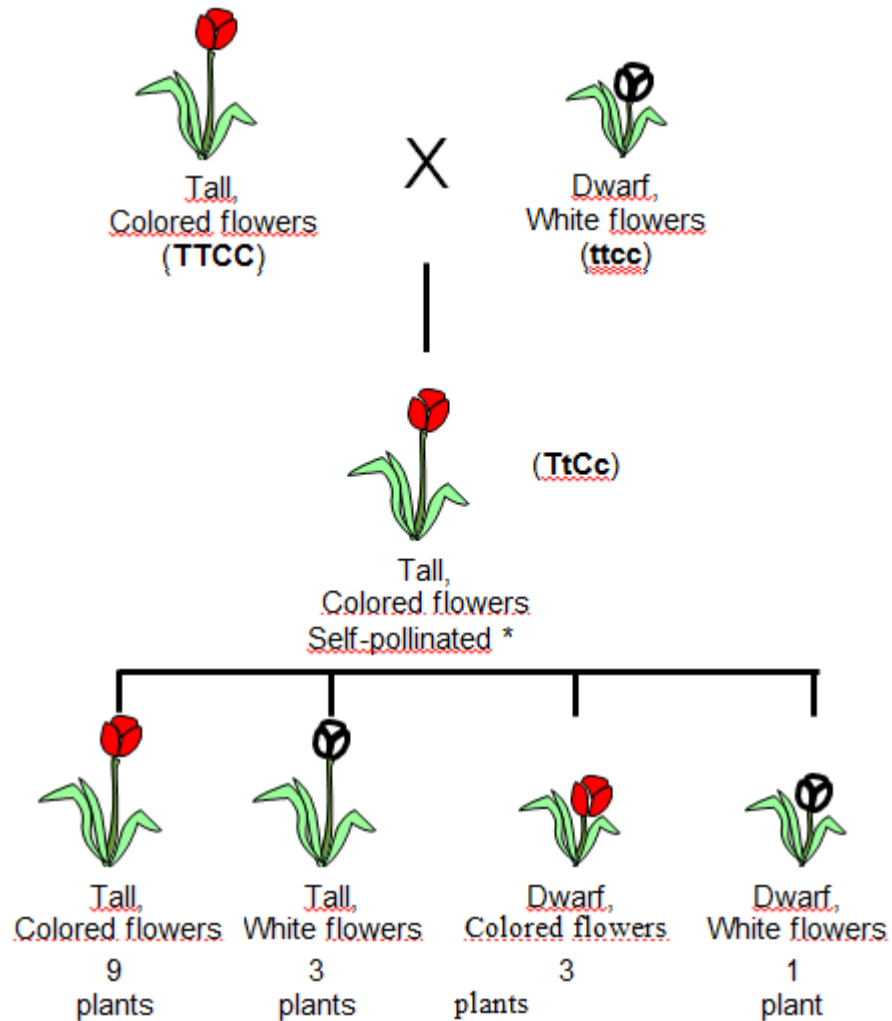
(Photo: iStockphoto.com/Grigorev_Vladimir)



Evolution of Wheat yield in France



Phenotypal expression



* The plant pollinates itself, i.e., both the male and female gametes come from the same plant

Lodging



(Photo: iStockphoto.com/Ziva_K)

(Photo: BSPB)

Lodging Height Earliness



Lodging
Height
Earliness
Resistance to sprouting

Mildew
Yellow rust
Brown rust
Stem rust (e.g. Ug99)
Septoria nodorum
Septoria tritici
Eyespot
Fusarium ear blight
Orange wheat blossom midge



(Photo: iStockphoto.com/shellpreast)



(Photo: Agriculture and Horticulture Development Board)

Lodging
Height
Earliness
Resistance to sprouting

Mildew
Yellow rust
Brown rust
Stem rust
Septoria nodorum
Septoria tritici
Eyespot
Fusarium ear blight
Orange wheat blossom midge

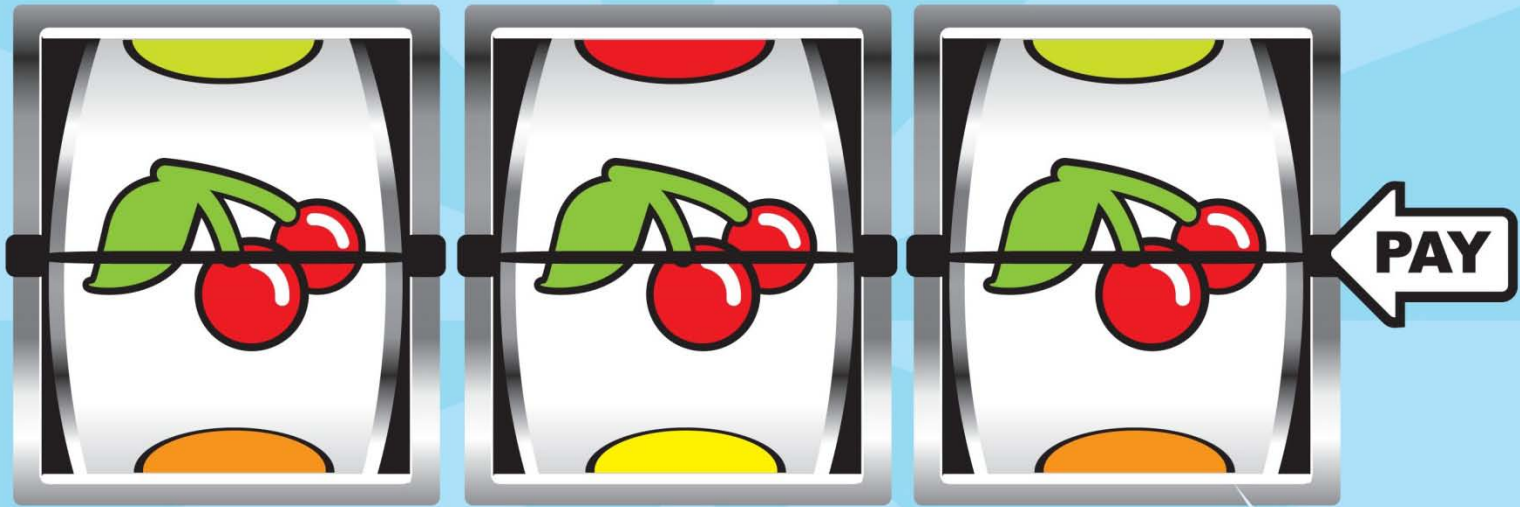
Yield: treated/untreated
Yield: early sown/late sown
Yield: light soil/heavy soil

Lodging
Height
Earliness
Resistance to sprouting

Mildew
Yellow rust
Brown rust
Stem rust
Septoria nodorum
Septoria tritici
Eyespot
Fusarium ear blight
Orange wheat blossom midge

Yield: treated/untreated
Yield: early sown/late sown
Yield: light soil/heavy soil

Breadmaking quality
Biscuit making quality
Feed quality





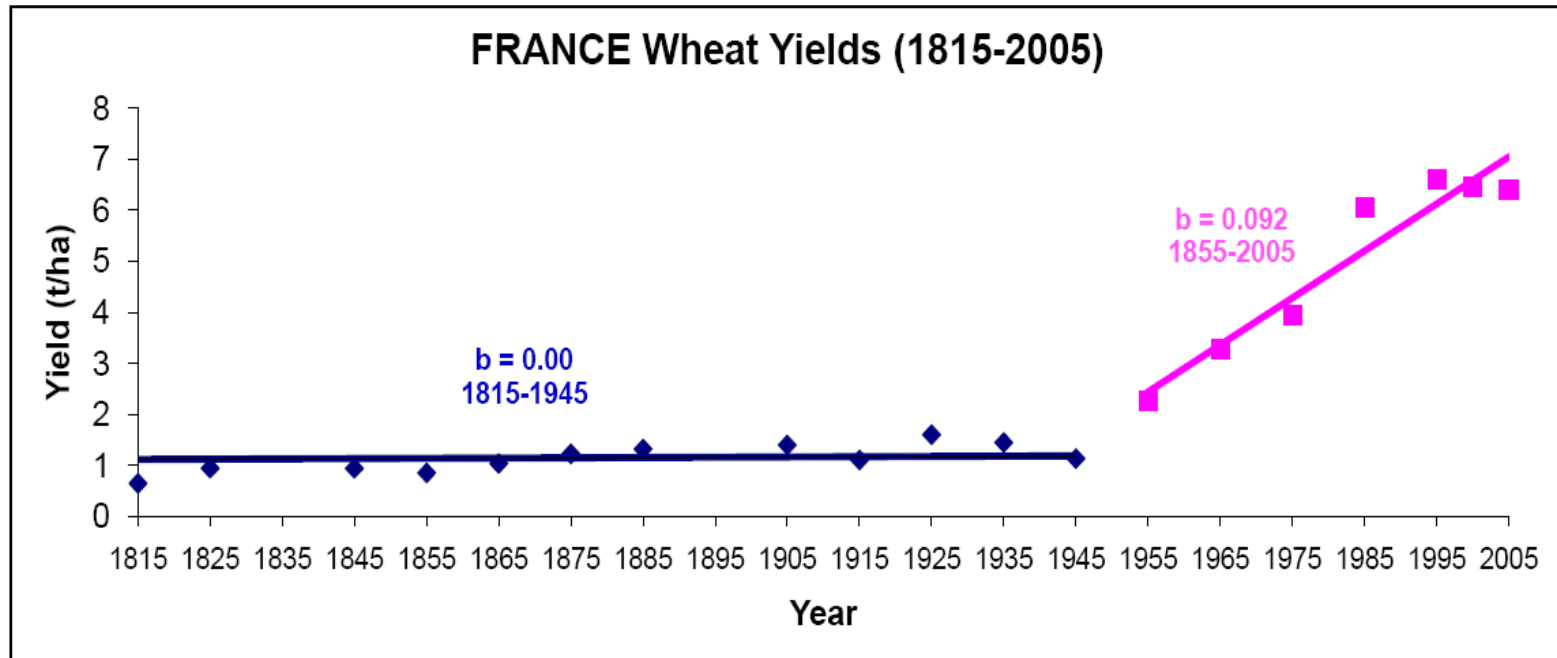
(Illustration: iStockphoto.com/jahachey)

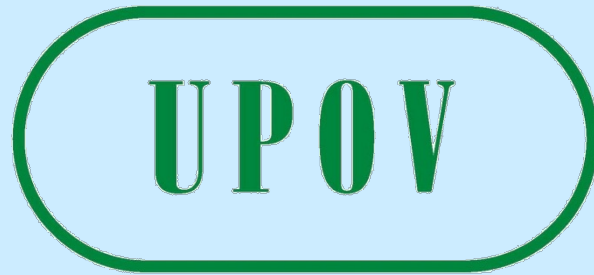


(Photo: iStockphoto.com/julos)



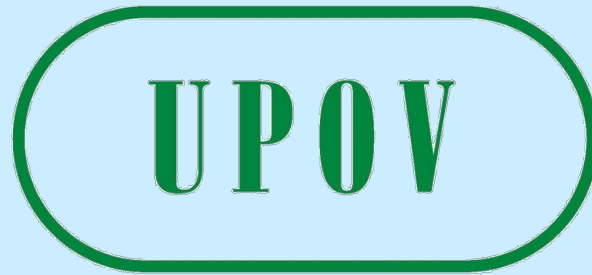
Evolution of Wheat yield in France





UPOV MISSION STATEMENT

“To provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society”

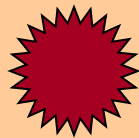


UPOV MISSION STATEMENT

“To provide and promote an **effective system of plant variety protection (PVP), [...]**”



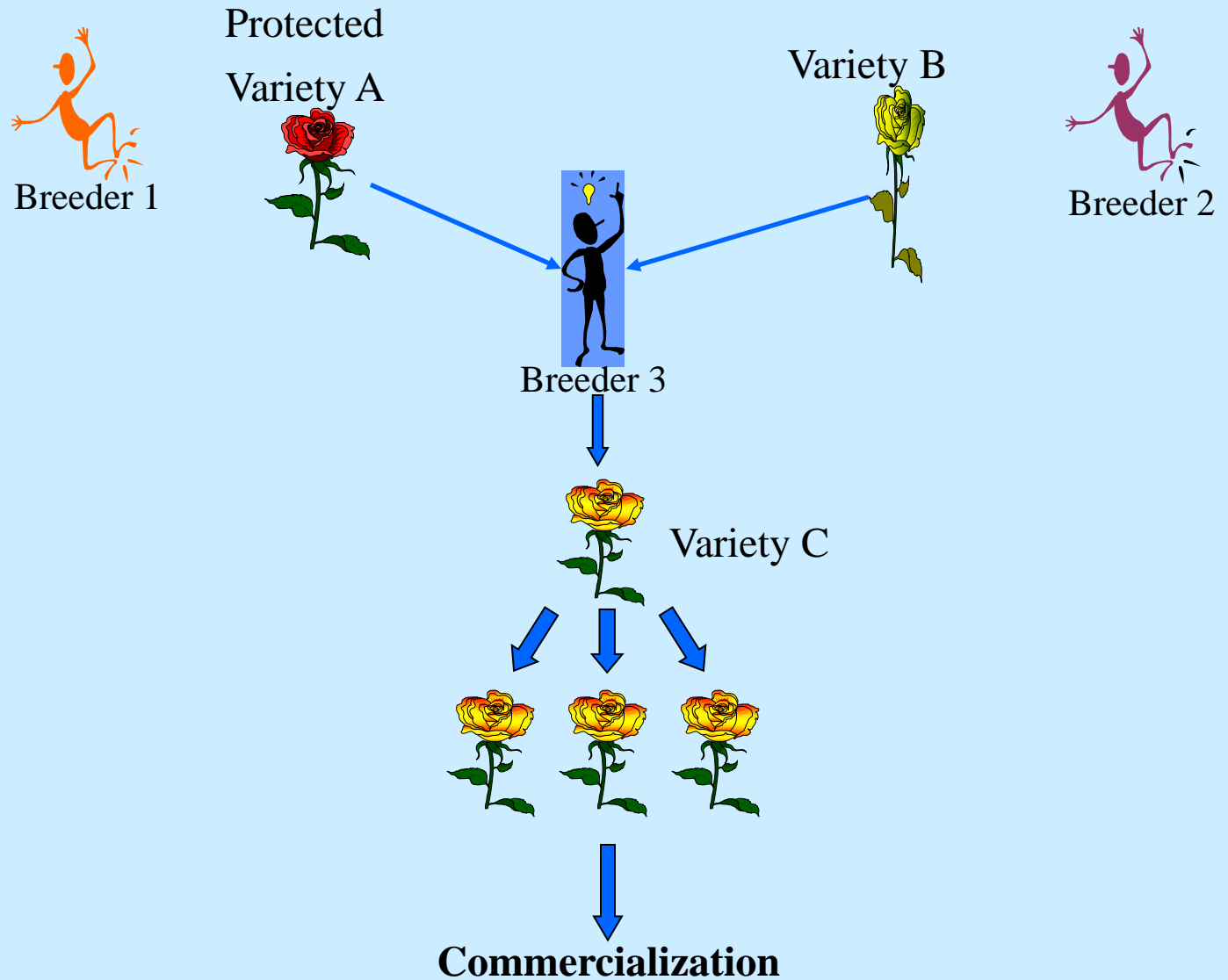
Plant Breeder's Right (PBR)

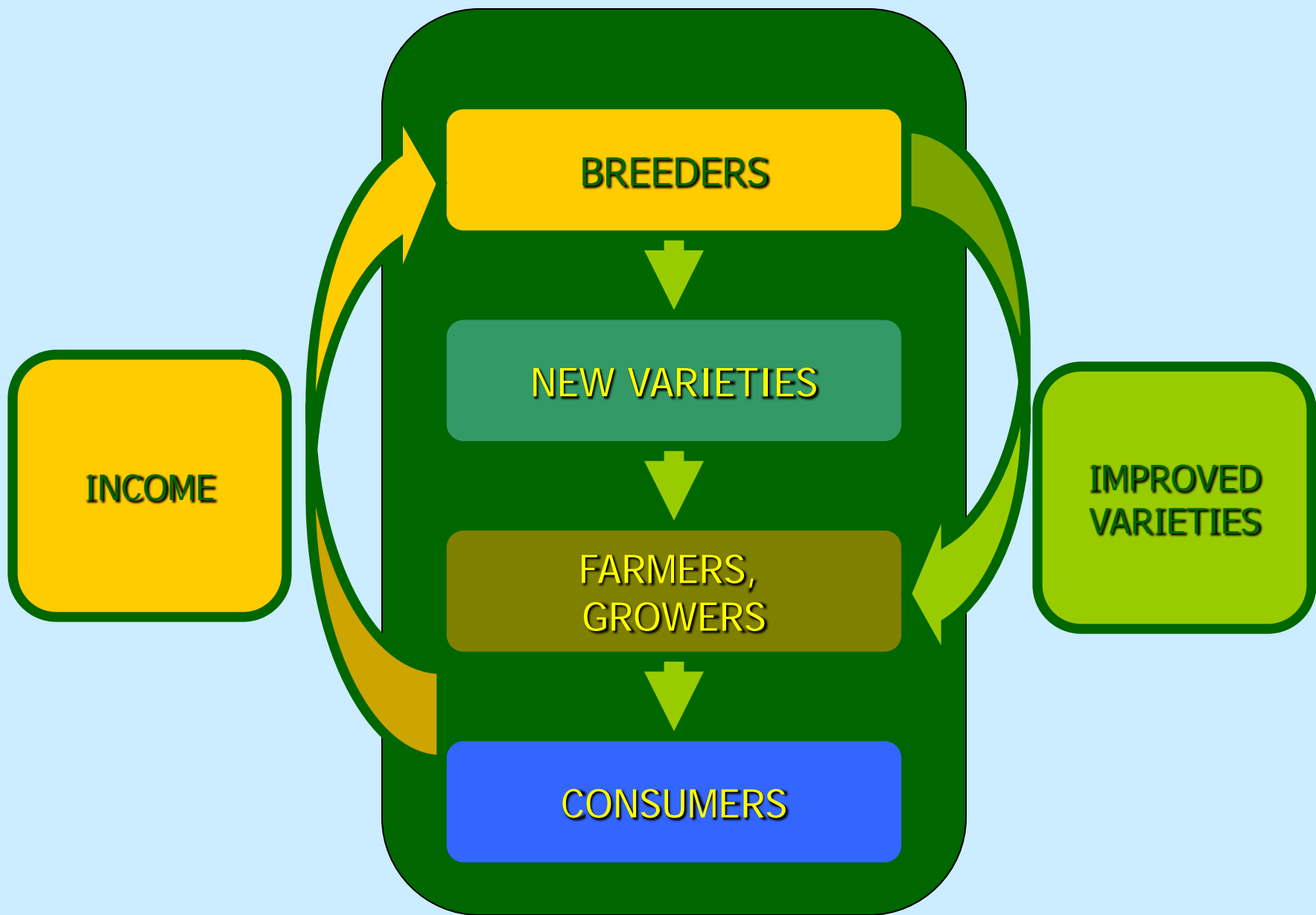


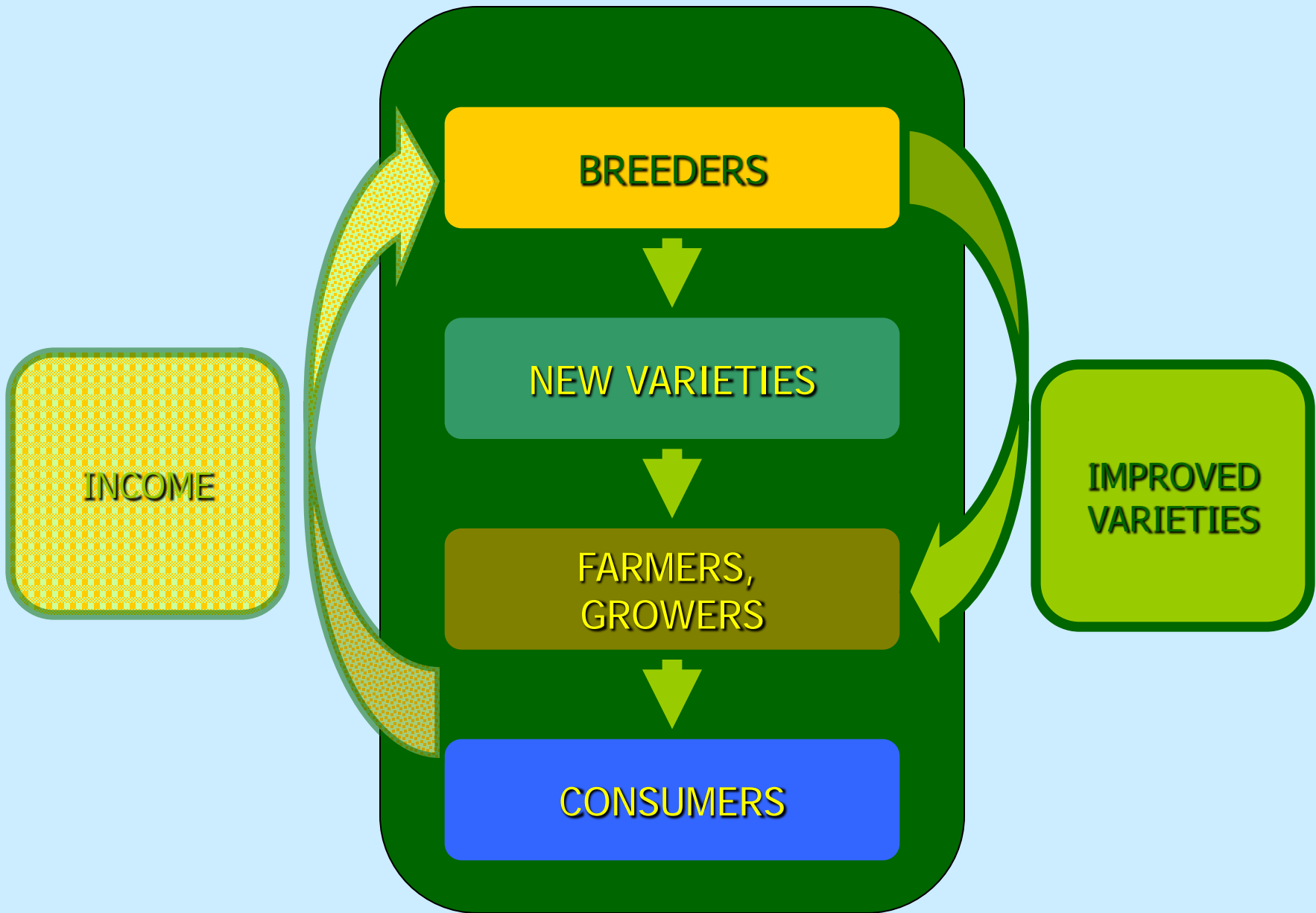
Can breeders use a protected variety in their breeding programs?

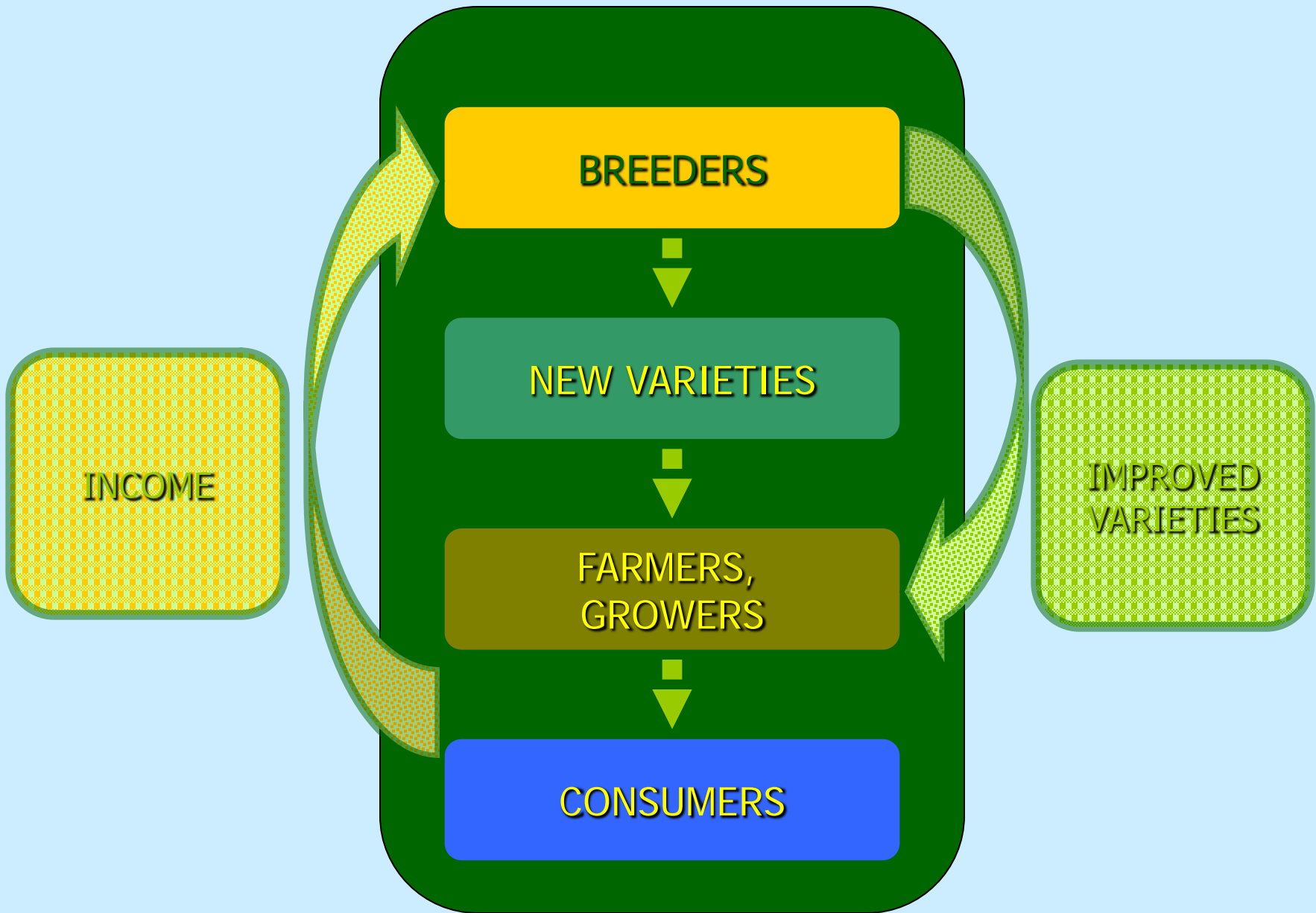
Under the “breeder’s exemption” in the UPOV Convention, the authorization of the breeder for the use of protected varieties for breeding purposes is not required.

THE BREEDER'S EXEMPTION: *Example*







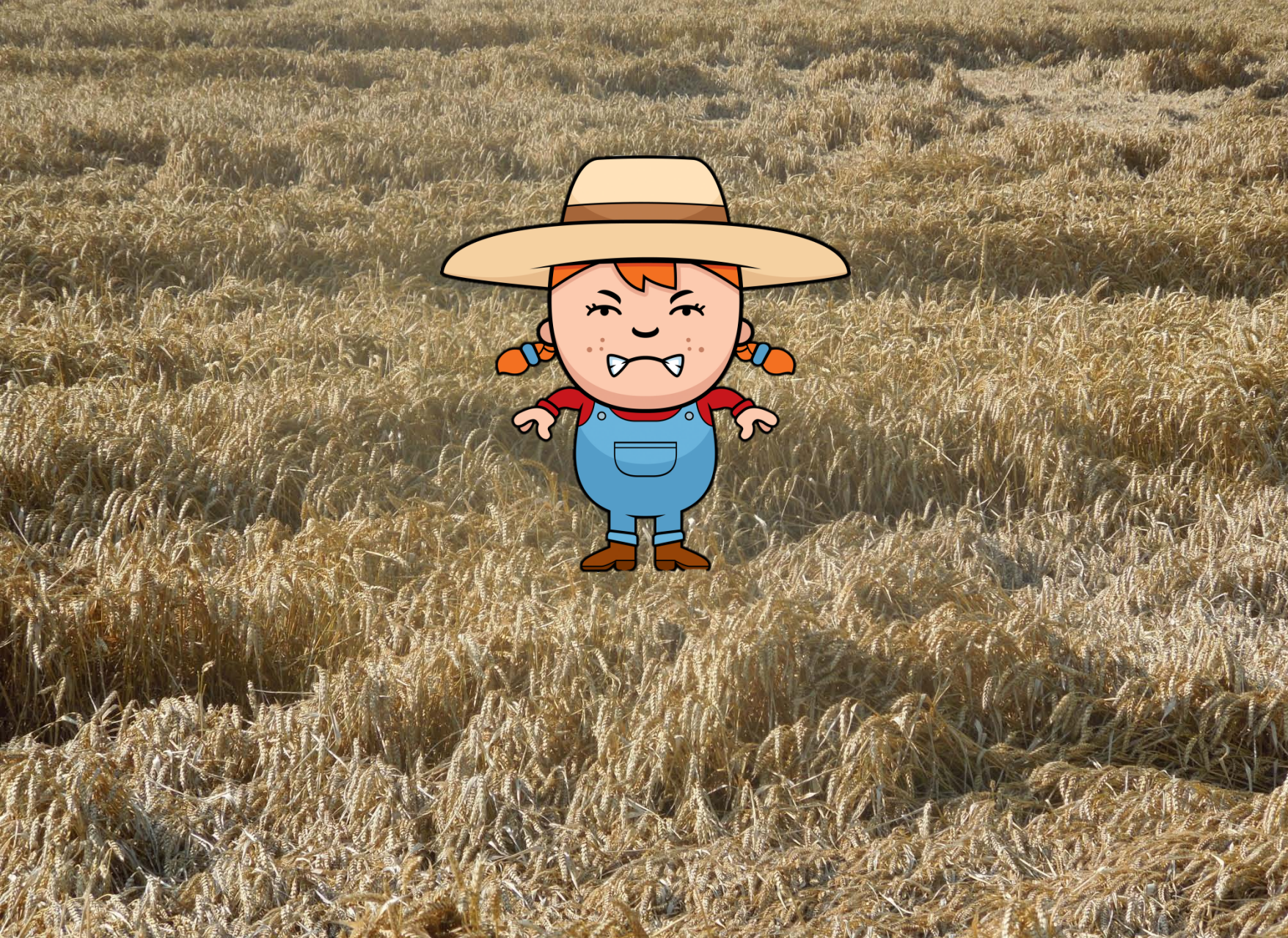




(Photo: iStockphoto.com/VladTeodor)

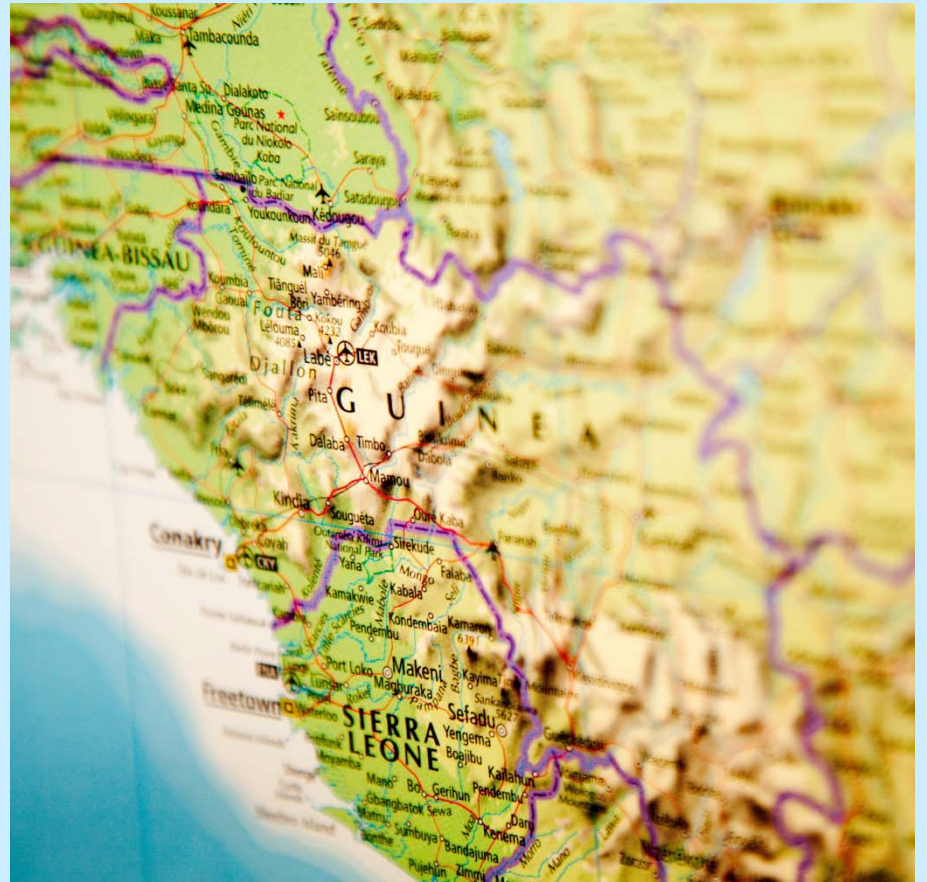


(Photo: iStockphoto.com/luoman)





(Photo: iStockphoto.com/scibak)



(Photo: iStockphoto.com/Lightguard)

Breeder Performance Test Trials



(Photo: Dupont/Pioneer)

Task sharing and part of public and private funding of the Swiss wheat breeding program

Public funding (Agroscope)

Variety development



Final Evaluation



Final Evaluation



Maintenance breeding,
Basic seed production,
PVR protection,
Variety representation in
Switzerland, in Europe and
worldwide

Private funding (DSP Ltd), source: Royalty fees from
protected varieties

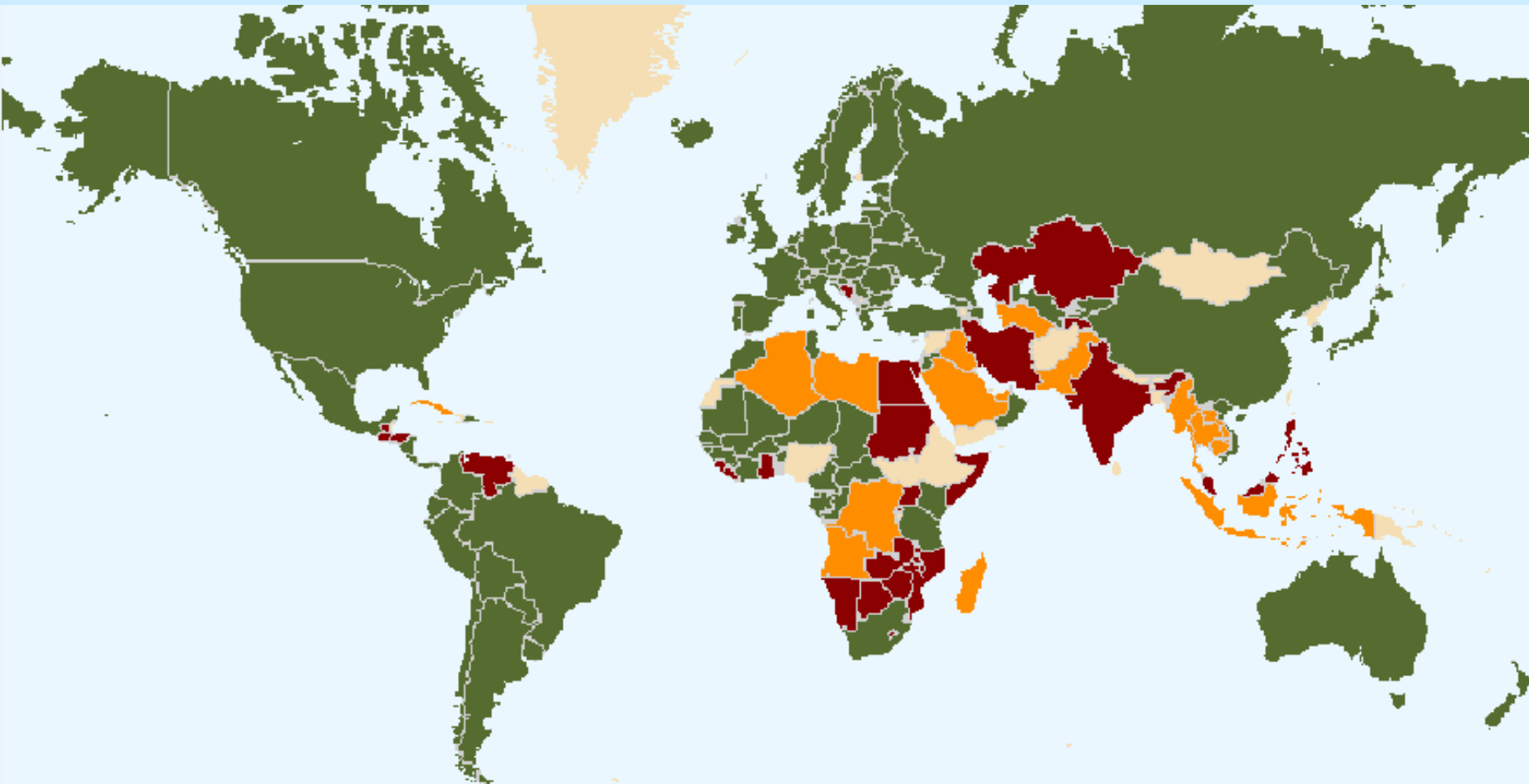


Vuyisile Phehane



• Delivering high performance varieties to subsistence/smallholder farmers

- Local licensing agreement with a South African company
 - for the commercialization of some of the ARC's citrus varieties.
 - A condition of the license: ensure the participation of smallholder citrus producers in the commercialization value-chain.
- Facilitated partnership with the Citrus Growers' Association to access ARC

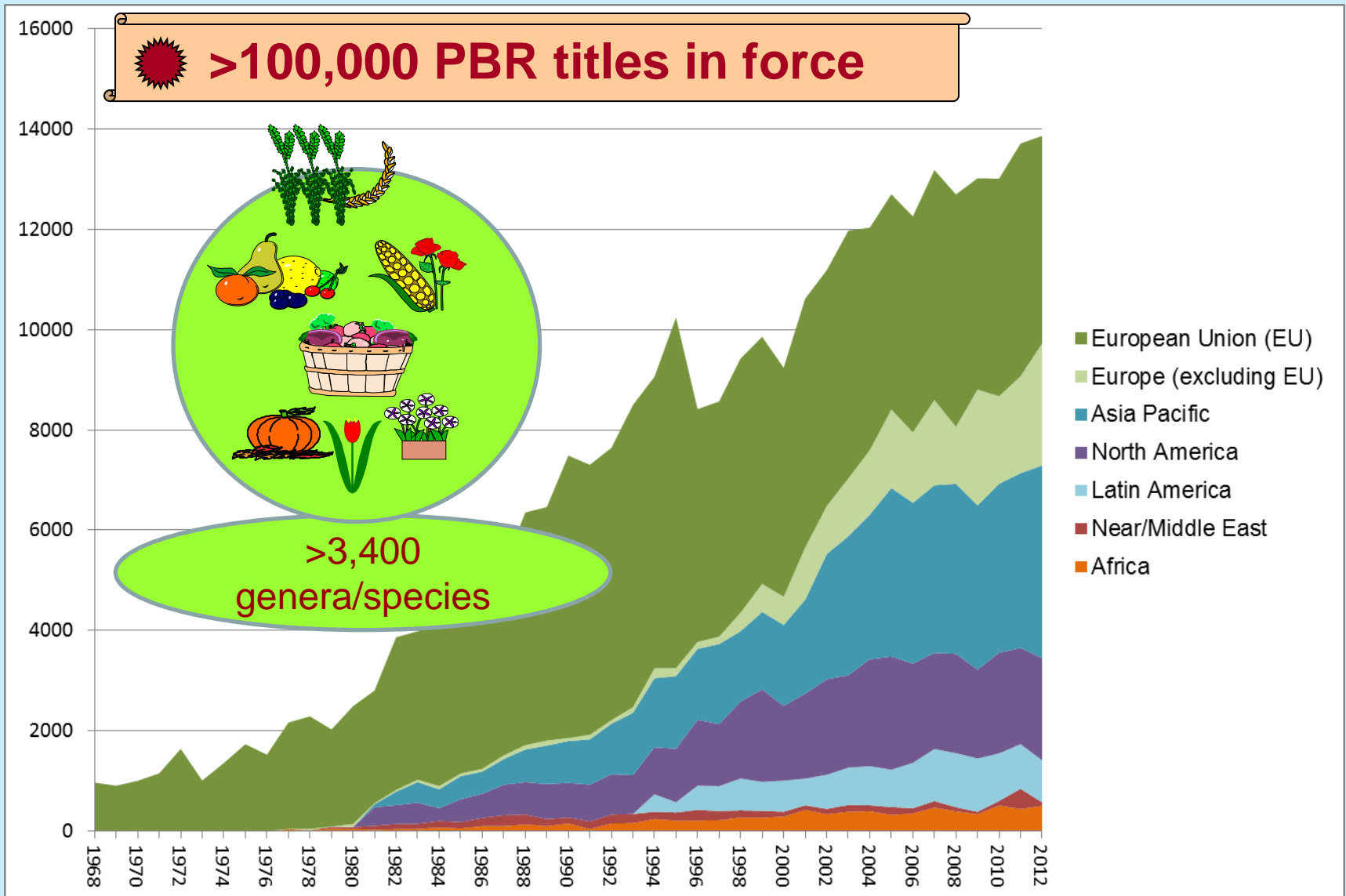


Members of UPOV (74)

Initiating States (15) and Organization (1)

States (23) and Organization (1) in contact with the UPOV Office

Applications for Plant Breeders' Rights





(Photo: iStockphoto.com/LawrenceKarn)