



**semmae**



Evolution de l'agriculture et du  
marché des semences depuis  
l'introduction des biotechnologies  
végétales

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# Importance des OGM dans le monde en 2018

- 192 millions d'hectares cultivés dans 27 pays
- 70 pays acceptent les produits issus des plantes transgéniques
- Soja représente 50%, maïs 31%, coton 13%, colza 5%
- 387 événements approuvés depuis 1992 de 27 espèces, y compris des fleurs



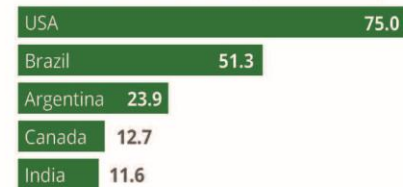
# Production d'OGM dans le monde

## Where are Biotech Crops Grown in the World?

26 countries planted 191.7 million hectares of biotech crops in 2018, the 23<sup>rd</sup> year of global commercialization of biotech crops



### TOP 5 COUNTRIES GROWING BIOTECH CROPS IN 2018 (MILLION HECTARES)





## BIOTECH SOYBEANS

FIRST COMMERCIAL PLANTING IN 1996

**95.9** MILLION HECTARES  
TOTAL AREA IN 2018



APPROVED FOR IMPORT IN  
**18 COUNTRIES**

PLANTED BY FARMERS IN  
**9 COUNTRIES**

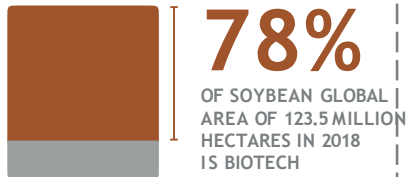


USA	PARAGUAY	BOLIVIA
BRAZIL	CANADA	SOUTH AFRICA
ARGENTINA	URUGUAY	CHILE

**38** APPROVED EVENTS IN  
**31 COUNTRIES**

SOYBEANS **50%** OF THE WORLD'S  
ACCOUNT FOR BIOTECH CROP AREA

**USA** IS THE WORLD'S TOP PRODUCER  
OF SOYBEANS  
**BRAZIL** IS THE TOP EXPORTER  
OF SOYBEANS IN THE WORLD



For more, download: [bit.ly/2018Soybeans](http://bit.ly/2018Soybeans)



## BIOTECH MAIZE

FIRST COMMERCIAL PLANTING IN 1996

**58.9** MILLION HECTARES  
TOTAL AREA IN 2018



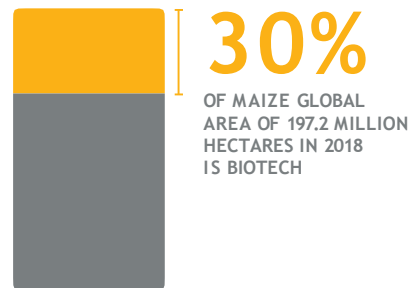
APPROVED FOR IMPORT IN  
**15 COUNTRIES**

PLANTED BY FARMERS IN  
**14 COUNTRIES**

USA	SOUTH AFRICA	VIETNAM
BRAZIL	URUGUAY	HONDURAS
ARGENTINA	PHILIPPINES	CHILE
CANADA	SPAIN	PORTUGAL
PARAGUAY	COLOMBIA	

**137** APPROVED EVENTS IN  
**35 COUNTRIES**

MAIZE EVENT **NK603** RECEIVED **61 APPROVALS** FROM  
**28 COUNTRIES**



For more, download: [bit.ly/2018Maize](http://bit.ly/2018Maize)



## BIOTECH COTTON

FIRST COMMERCIAL PLANTING IN 1996

**24.9** MILLION HECTARES  
TOTAL AREA IN 2018

APPROVED FOR IMPORT IN  
**8 COUNTRIES**



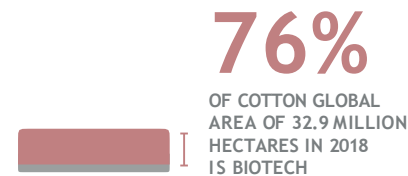
PLANTED BY FARMERS IN  
**15 COUNTRIES**

USA	CHINA	SUDAN
BRAZIL	PAKISTAN	MEXICO
ARGENTINA	SOUTH AFRICA	COLOMBIA
INDIA	AUSTRALIA	COSTA RICA
PARAGUAY	MYANMAR	ESWATINI

**63** APPROVED EVENTS IN  
**27 COUNTRIES**

**INDIA** IS TOP COTTON PRODUCER  
IN THE WORLD

**7.5** MILLION FARMERS  
AND THEIR FAMILIES  
IN INDIA HAVE ENJOYED THE  
BENEFITS OF PLANTING BT COTTON



For more, download: [bit.ly/2018Cotton](http://bit.ly/2018Cotton)



## BIOTECH CANOLA

FIRST COMMERCIAL PLANTING IN 1996

**10.1** MILLION HECTARES  
TOTAL AREA IN 2018



APPROVED FOR IMPORT IN  
**10 COUNTRIES**

PLANTED BY FARMERS IN  
**4 COUNTRIES**

USA CANADA AUSTRALIA CHILE

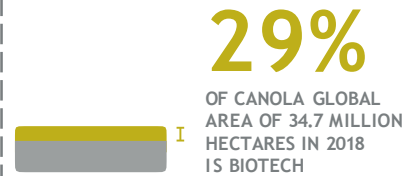
**37** APPROVED EVENTS IN  
**15 COUNTRIES**

**95%** BIOTECH CANOLA'S  
ADOPTION RATE IN CANADA

**CANADA** PLANTED 8.7 MILLION HECTARES  
BIOTECH CANOLA IN 2018

MOST OF BIOTECH CANOLA  
PLANTED IN CANADA ARE **HERBICIDE TOLERANT**

**CHILE** GROWS BIOTECH CANOLA  
FOR SEED EXPORT



For more, download: [bit.ly/2018Canola](http://bit.ly/2018Canola)



## BIOTECH ALFALFA

FIRST COMMERCIAL PLANTING IN 2006

**1.3** MILLION HECTARES  
TOTAL AREA IN 2018

APPROVED FOR IMPORT IN  
**5 COUNTRIES**

PLANTED BY FARMERS IN  
**2 COUNTRIES**

USA CANADA



**5** APPROVED EVENTS IN  
**10 COUNTRIES**

CANADA PLANTED **HARVXTRA™**  
ALFALFA | USA PLANTED  
RR® & **HARVXTRA™**  
ALFALFA

## HARVXTRA™ ALFALFA

WAS FIRST PLANTED IN 2016

**HIGH DEMAND FROM FARMERS**

- CONTAINS LESS LIGNIN
- HIGHER DIGESTIBILITY
- OFFERS 15-20% YIELD INCREASE

BIOTECH ALFALFA ADOPTION RATES IN THE USA  
AND CANADA IS LIKELY TO INCREASE AS MORE AND  
MORE FARMERS REALIZE THE BENEFITS OF THE  
TECHNOLOGY IN LIVESTOCK PRODUCTION AND FARM  
MANAGEMENT.

For more, download: [bit.ly/2018Alfalfa](http://bit.ly/2018Alfalfa)



### TOP 5 BIOTECH CROPS IN THE WORLD

[WWW.ISAAA.ORG](http://WWW.ISAAA.ORG)

AN ISAAA INFOGRAPHIC BY CLEMENT DIONGLAY

SOURCES: ISAAA Brief 54 ([bit.ly/ISAAABrief54](http://bit.ly/ISAAABrief54))

ISAAA GM Approval Databases ([bit.ly/GMApprovalDatabase](http://bit.ly/GMApprovalDatabase))

ISAAA Pocket K No. 2 ([bit.ly/PKNo2](http://bit.ly/PKNo2))

NOTE: In these ISAAA resources, the European Union (EU = 28 countries) is counted as one (1) country.

[www.facebook.com/isaaa.org/](http://www.facebook.com/isaaa.org/)

[www.instagram.com/isaaa.org/](http://www.instagram.com/isaaa.org/)

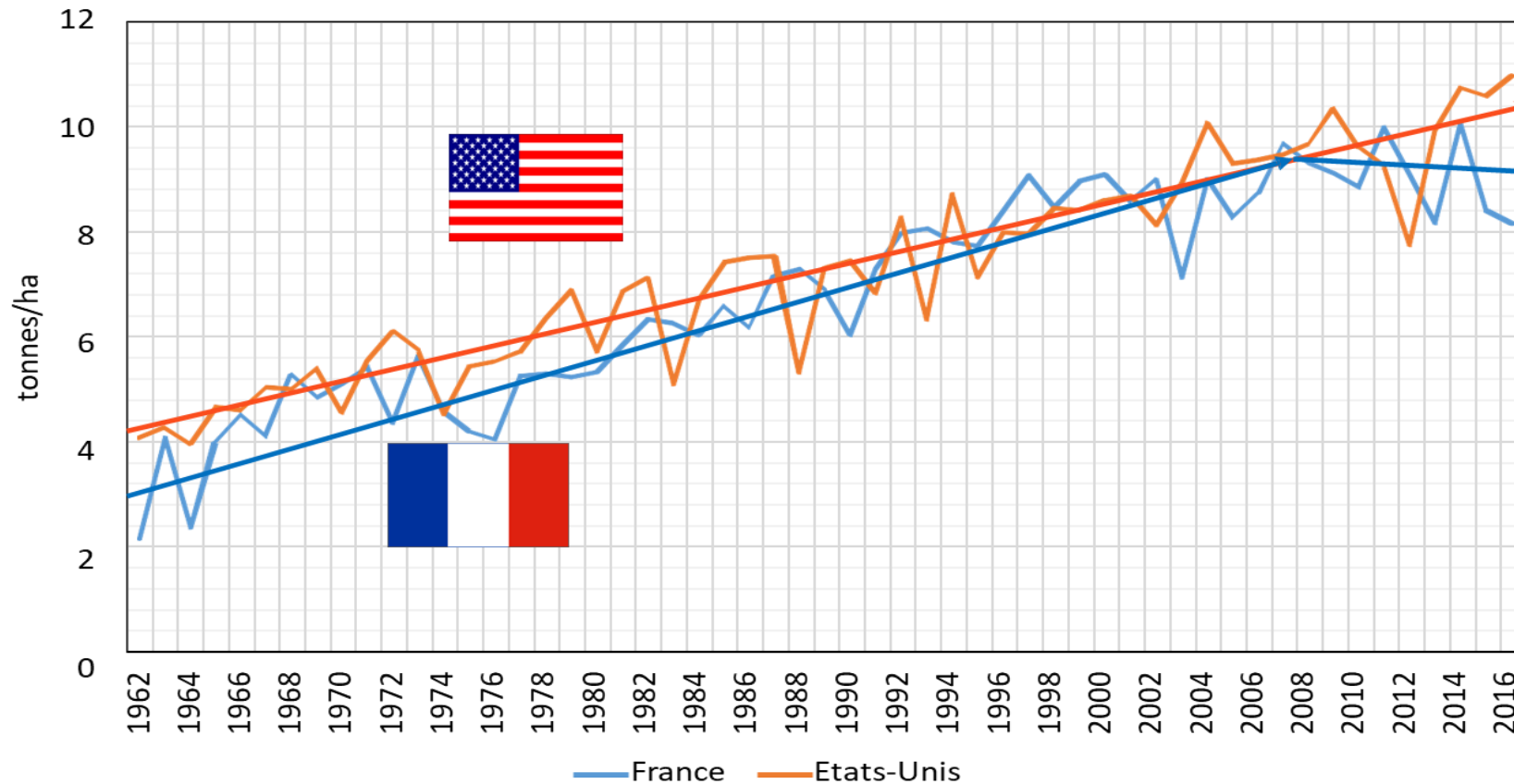
[www.twitter.com/isaaa.org/](http://www.twitter.com/isaaa.org/)

JUNE 2020

# Quelles conséquences sur l'agriculture ?

## Exemple du maïs

Rendement du maïs - France vs. Etats-Unis

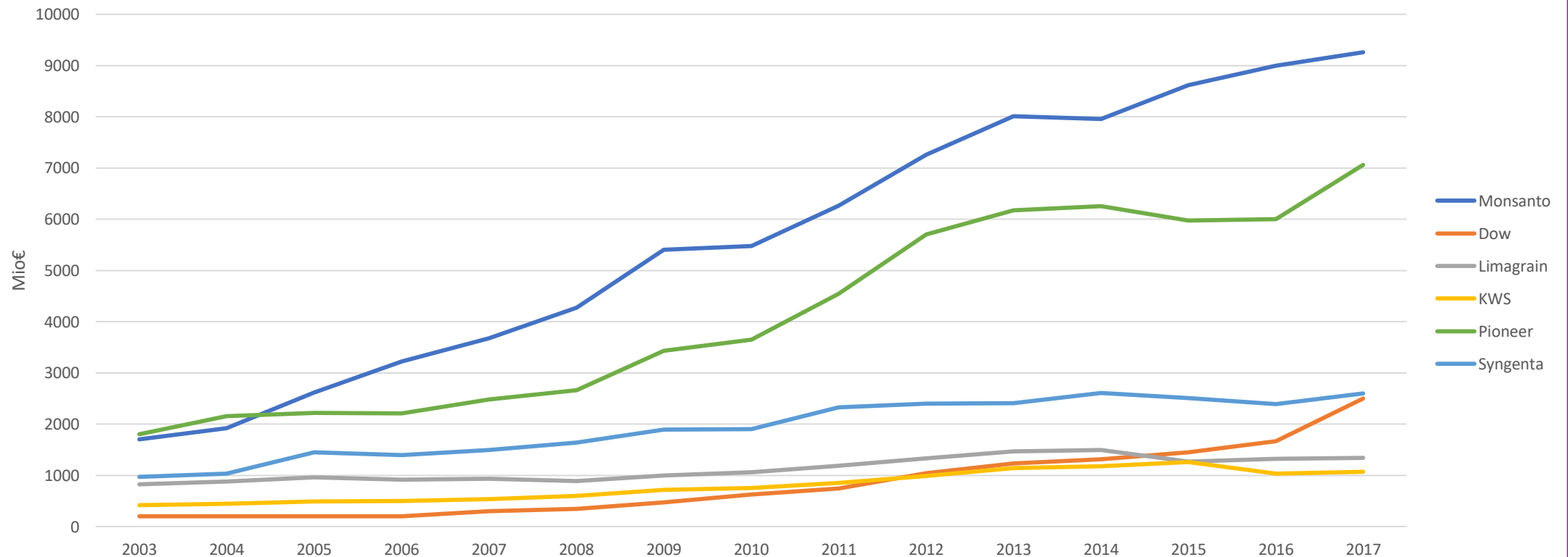


Sources : FAO, USDA



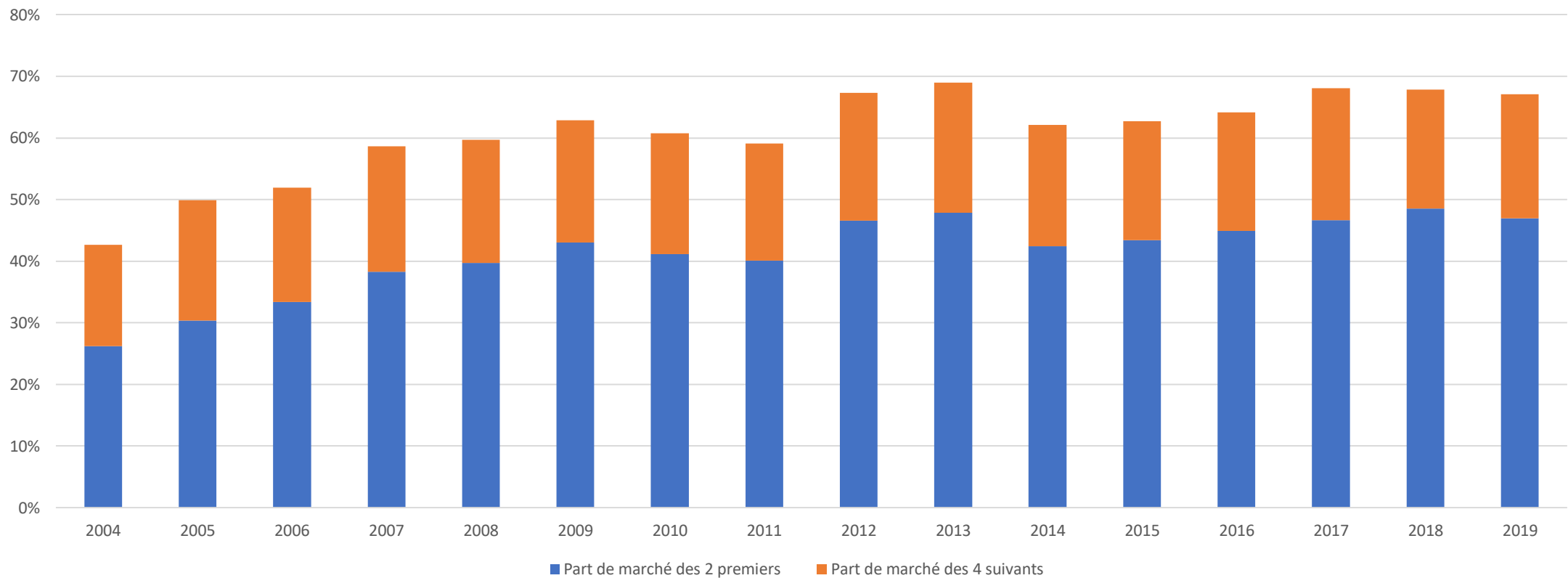
# Quelles conséquences sur la filière semencière mondiale ?

Semences Monde- Evolution du chiffre d'affaire des 6 premières entreprises



# Quelles conséquences sur la filière semencière mondiale ?

Semences Monde- Part de marché des 6 premiers



# Quelles conséquences sur la filière semencière française ?

- Illusion car la France est toujours premier exportateur mondial de semences agricoles et premier producteur de semences en Europe.
- Mais perte d'influence : protocole de Carthagène en Afrique de l'Ouest.
- Risque surtout face à l'arrivée des NBT.





# En quoi les NBT changent la donne ?

- Les pays modifient leur législation : grande partie de l'Amérique, Australie, Japon, Philippines, Indonésie.
- En Afrique, l'UA pour la première fois propose un texte encourageant l'usage de toutes les technologies.
- Les CG Centers utilisent largement ces techniques : CIMMYT sur maïs et blé, ICRISAT sur céréales pour zones arides, IITA sur plantes à racines et bananes, World Vegetable Center sur tomate et IRRI.



