# Seed production in Croatia - achievements and outlook

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### Introduction

The *total area* of the Republic of Croatia behave about 56.538 km<sup>2</sup>, *territorial sea* 31.000 km<sup>2</sup>, total population 4,7 mio., *total agricultural land* 3,5 mio. ha, *agricultural population* of total population 8,6%. The *share of agriculture, forestry and fishing* in the total GD are 10,0%.

#### Table 1: Agricultural land

total agricultural land	3,53 mio.ha
arable land	1,84 mio. ha
vineyards	58.000 ha
orchards	57.000 ha
meadows	413.000 ha
pasture	1,14 mio.ha

lake, fishponds and marshlands 26.000 ha

### **Croation seed program**

Croatia decrees about tradition in seed production, excellent soil and climatic conditions. The capacity for seed storages and processing is very extensive. Besides Croatia has experienced experts at its disposal. The implementation of international rules in seed is a matter of course. The legislation are harmoniesed with EC directives and Croatia is a GMO-free country.

#### Administrative components

All administrative components are in state sektor.

The new law and regulations incorporate EU-directives and regulations.

Croatia applies rules of international organisations:

OECD, ISTA, UPOV, relevant for the domestic and international seed moving.

The institute for seeds and seedlings is responsible for implementation of the law and regulations.

#### **Technical components**

All technical components are in private sector.



Figure 1: Croatia

#### **Breeding companies:**

domestic and international seed companies provide about 3.500 varieties in the national variety list:

- 150 seed producers
- 17 seed processing companies
- 200 trade companies

#### Institute for seed and seedlings

The national state institution was established in 1998 in Osijek.

#### This institution is responsible for

- · variety testing and plant variety
- protection
- field inspectionseed certification and
- gene bank

#### Seed production in Croatia

#### Following the average in 1999-2004

cereals	20.000 ha
maize	5.400 ha
oil crops	3.000 ha
fodder crops	1.000 ha
grasses	500 ha
vegetables	500 ha
potato	200 ha
other crops	100 ha

# Seed certification in Croatia for domestic market

#### average 1999-2004

cereals	66.408 tones
maize	8.806 tones
oil crops	5.089 tones
fodder crops	549 tones
grasses	376 tones
sugar beet	52.000 units
potatoes	9.422 tones
vegetables	870 tones
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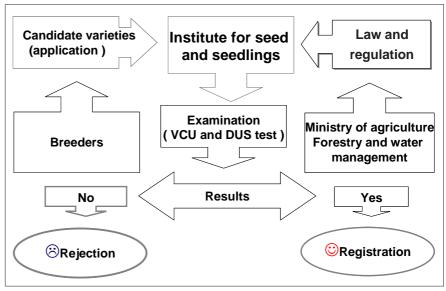


Figure 2: Schematic overview of variety testing

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#### Table 2: Production - Import - Export (average 1999-2004)

species	domestic production	import	export
cereals	66.222	186	981
maize	7.752	1.054	1.503
oil crops	4.974	115	44
fodder crops	346	203	6
grasses	155	221	6
vegetables	307	563	0
potato	4.141	5.281	0
sugar beet	0	52.000	0



Figure 3: Main Areas for Seed Production

# Seed certification in Croatia for export

aver	age 1999-2004
cereals	981 tones
maize	1.503 tones
oil crops	44 tones
fodder crops and grasses	200 tones
other crops	1.000 tones

## Croatian seed program

#### Future activities:

- developing plant breeding, seed production and trade
- developing and suggesting new regulations concerning plant breeding, seed production and trade
- harmonisation seed law and regulations with international institutions and integrating plant breeders and seed traders in all activities
- integrating Croatian seed market with the world seed industry on the higher level

### Conclusion

Croatia has a long tradition in seed production. Croatian seed industry has an excellent infrastructure and could be a stronger partner in the international seed market.