

CULTIVATION AND PERSPECTIVES OF OIL SEED RAPE IN RUSSIA

Sergey Tuchin

Crop consulting expert, Russia

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Cultivation and Perspectives of Oilseed Rape in Russia.

Sergey Tuchin

Crop Consulting Expert, Kolomna, Moscow region, Russia 140410

At present, agricultural producers show an increased interest in oilseed rape cultivation since the commodity price of oil seeds has actually doubled over the past two years and the crop has become more profitable compared to cereals especially in Non-black soil areas of the European part of Russia and the vast Siberian region. As for the regional positioning of rapeseed, the main crop is spring rapeseed. The winter oilseed rape is mainly cultivated in Kaliningrad and Northern Caucasus regions due to the milder winter season. The area of oilseed rape cultivation has been increasing continuously since 2005 due to introduction of spring oilseed rape in the crop rotation as a totally new crop for most of the farms. The total planted area of rapeseed was only 244,000 hectares in 2005, and the current sowing area of rapeseed (spring and winter types) is about 1.1 million hectares, including about 900,000 hectares of spring rapeseed and 180,000 hectares of winter oilseed rape. In spite of this increase in acreage, the average yield rate remains at the very low level of 1.2-1.4 t/ha, which indicates the still weak material and technical machinery and equipment of farms and the need to introduce new hybrid varieties that would provide an increase of yield levels. In order to obtain the maximum yield rate of hybrid varieties, it is necessary to use intensive technologies of oilseed rape cultivation, which allow to fully reveal the potential of each hybrid. Long-term experience of agro holding companies show that rapeseed hybrids can produce stable high yields while observing all technological operations and proper crop management. The level of the rapeseed cultivation area directly depends on the market situation and the potential for spring oilseed rape is very high. The current deficiency of oil crops for the processing industry is more than 2 million tons. Spring oilseed rape is grown where neither soybean nor sunflower is cultivated. In addition, the products of rapeseed processing such as the cake is a local protein source, which is actively used by livestock enterprises.

Overview

- Oil crops market in Russia;
- Oil seed rape acreage and market development in Russia;
- SOSR sowing acreage;
- WOSR sowing acreage;
- SOSR varieties registration status;
- Russian institutes activities in oil seed rape breeding;
- Challenges in oil seed rape cultivation in Russia;
- Perspectives of oil seed rape cultivation in Russia.

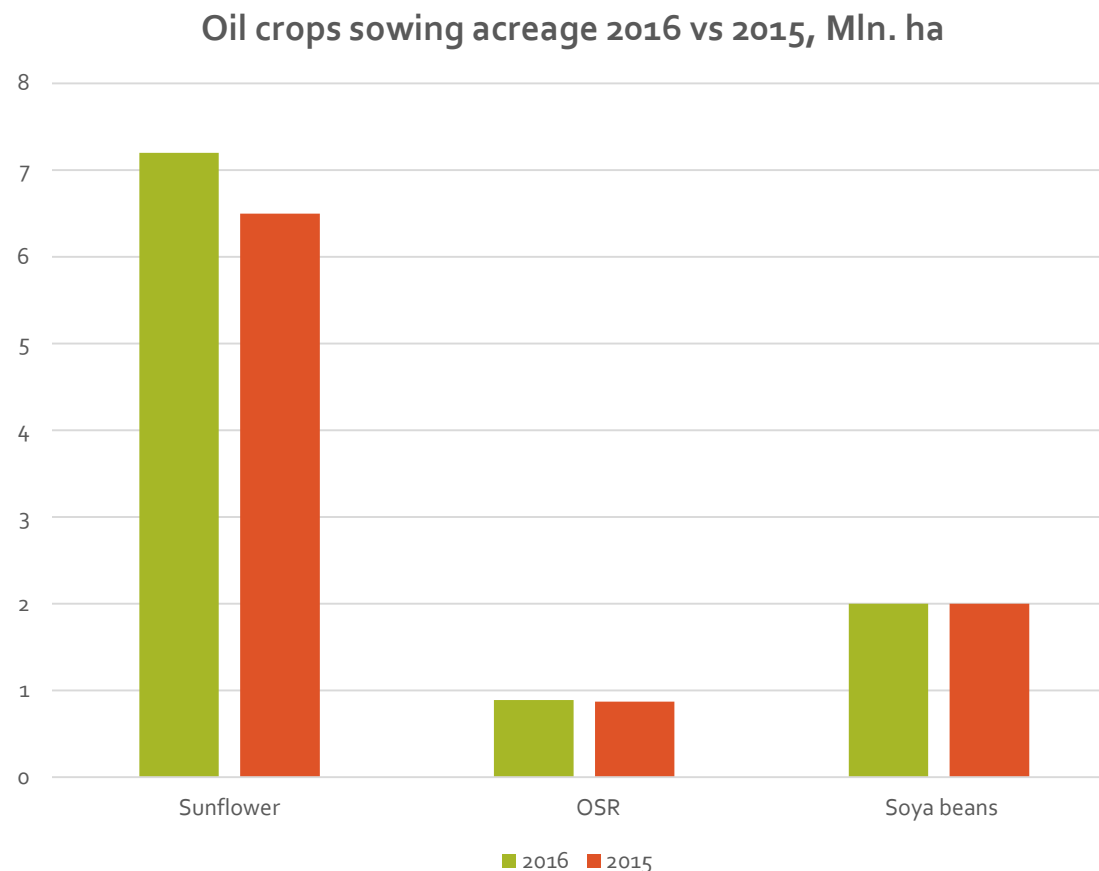
The map of Russian Federation (RF)



The total OSR sowing acreage was 995 Kha in 2016.

Oil crops market in Russia 2015 vs 2016

- There are 3 main oil crops in Russia with the total sowing acreage over 10 Mln ha: sunflower, soya beans and oil seed rape (OSR);
- OSR stands on the 3rd place with total sowing acreage close to 1 Mln ha. That is about 10% from the total acreage of the 3 main oil crops;

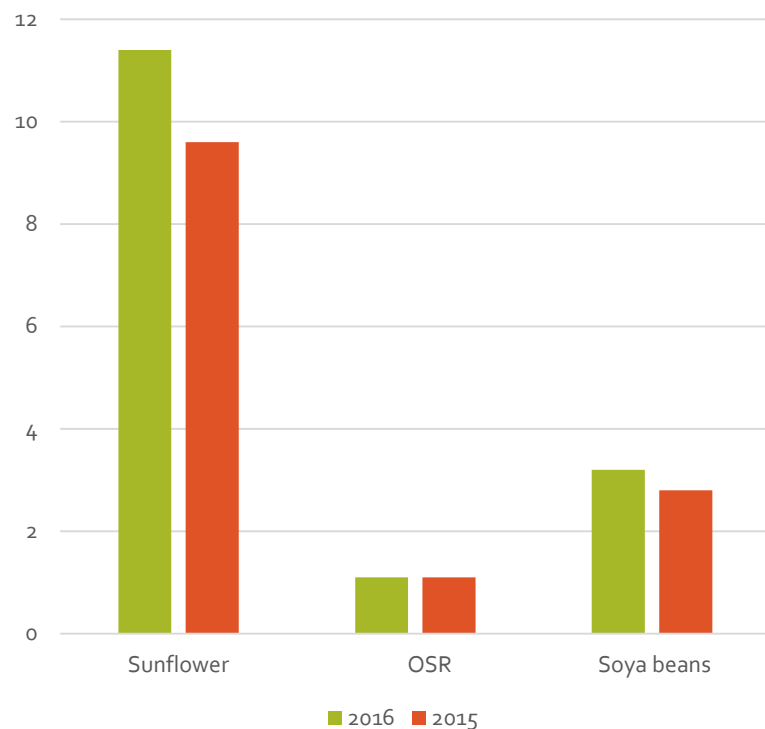


Source: Ag. Ministry
Statistics Russian

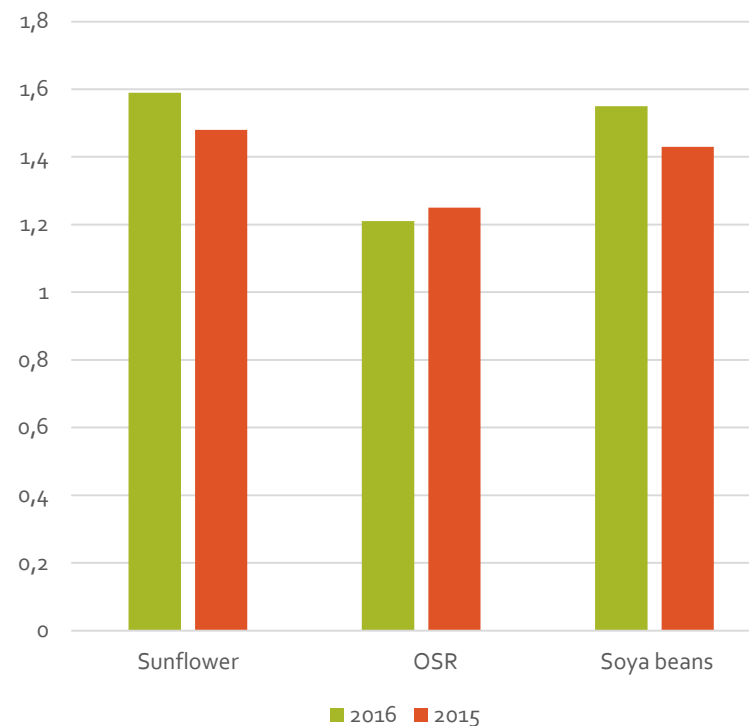
Oil crops market in Russia 2015 vs 2016

- The total obtained yield of soya beans, sunflower and OSR has reached 15,7 Mln tn in 2016;
- The OSR harvested volume was fixed at the level of 1,1 Mln. tn. The average yield rate of the 3 main oil crops is quite low: 1.2-1.6 tn/ha depending on the crop.
- The total crushing industry capacity is over 22 Mln tn and the deficiency is still over 2 Mln tn of oil crops !

Oil crops obtained harvest 2016 vs 2015 in RF, Mln. tn



Oil crops yield rate comparison 2016 vs 2015, tn/ha



Source: Ag. Ministry
Statistics Russian

Oil seed rape acreage and market in Russia

The total arable land is about 115 Mln ha

The total **abandoned** land acreage is more than **40 Mln** ha.

OSR sowing acreage about 1 Mln ha:

SOSR – fcst 2017: 868 Kha (872 Kha in 2016)

WOSR – 182 Kha, including: 122 Kha for oil seeds and 60 Kha for forage (2016/17)

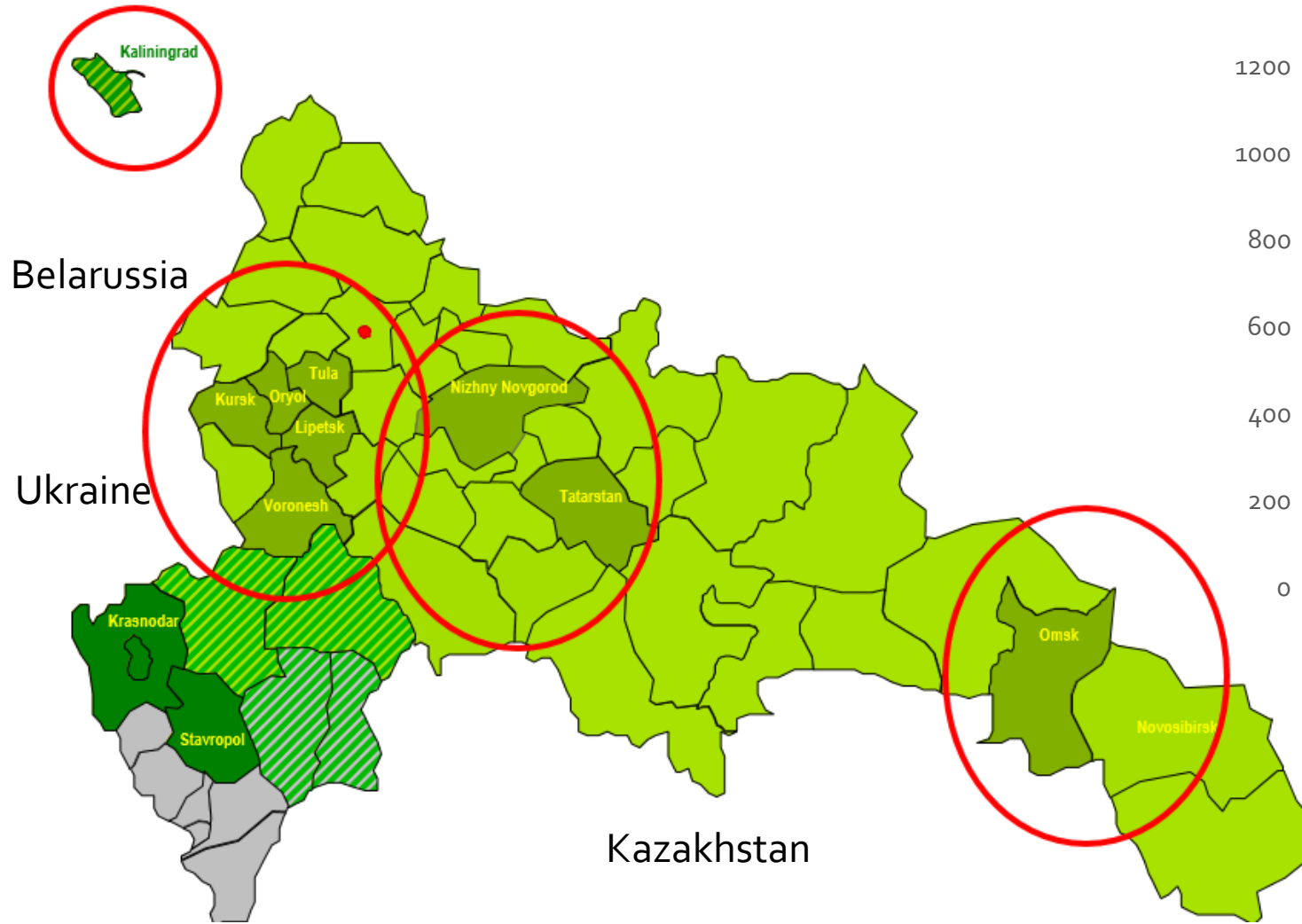
Source: Ag. Ministry

Market situation:

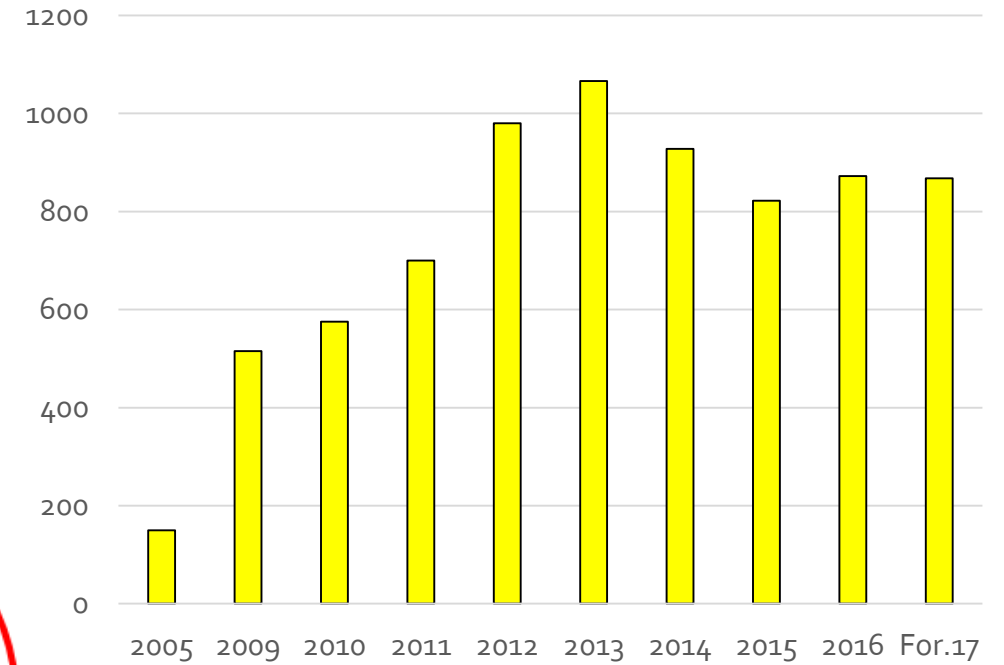
OSR becomes more profitable crop in comparison with cereals, especially in non black soil regions. For instance, 1 tn of oil seed rape is equal 2,5 tn of forage wheat (based on local commodity prices).

The current local market price for commodity sunflower is lower than for OSR.

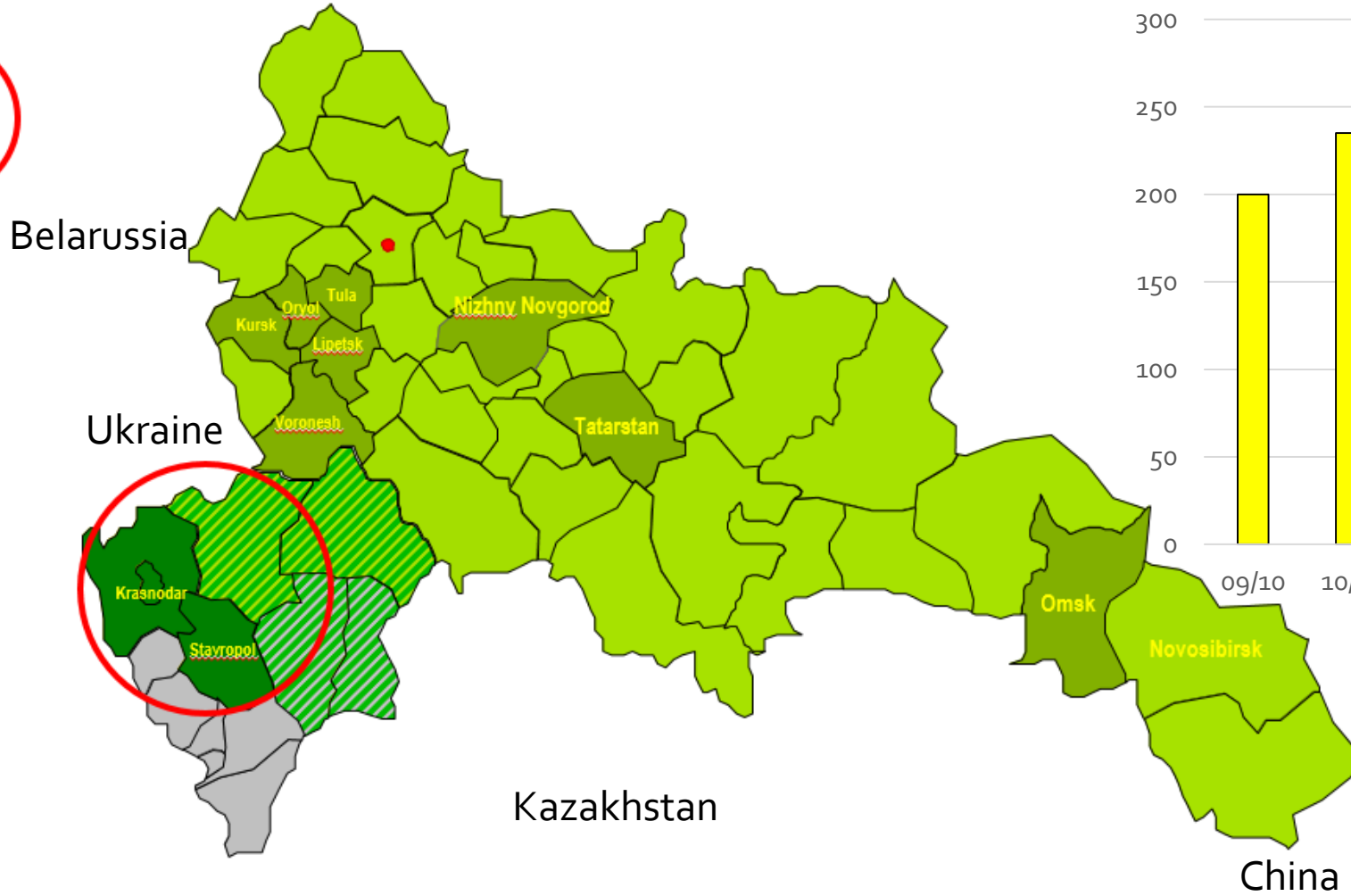
Spring oilseed rape sowing acreage in 2005-2017, Kha



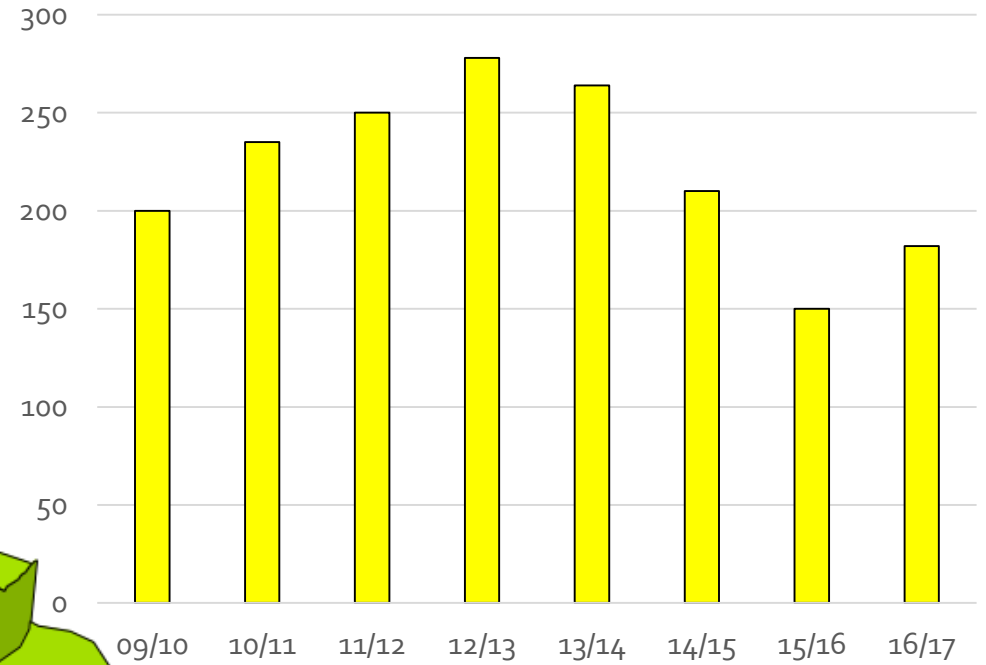
Spring OSR acreages in kha



Winter oilseed rape sowing acreage in 2010-2017, Kha

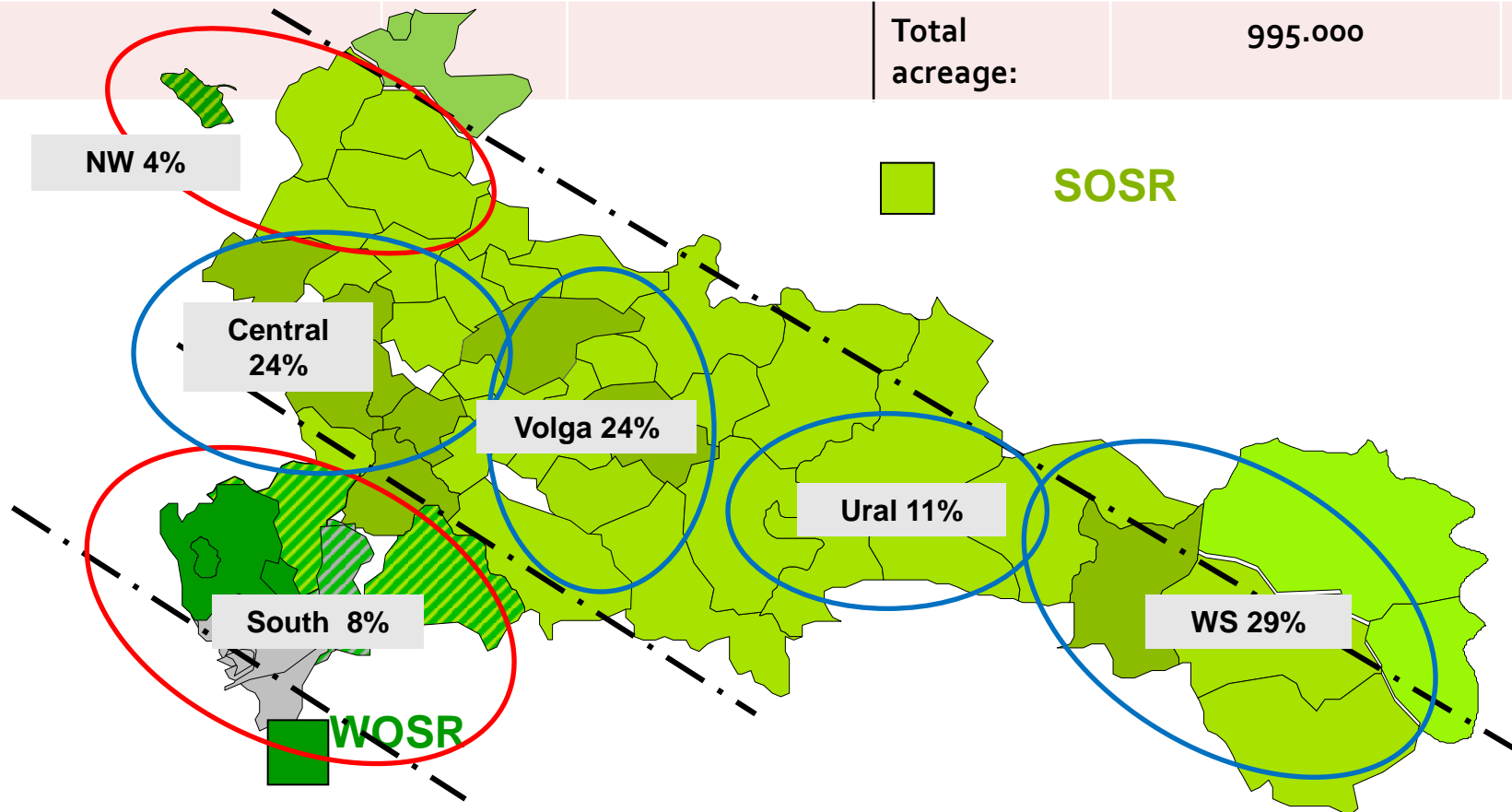


Winter OSR acreages in kha



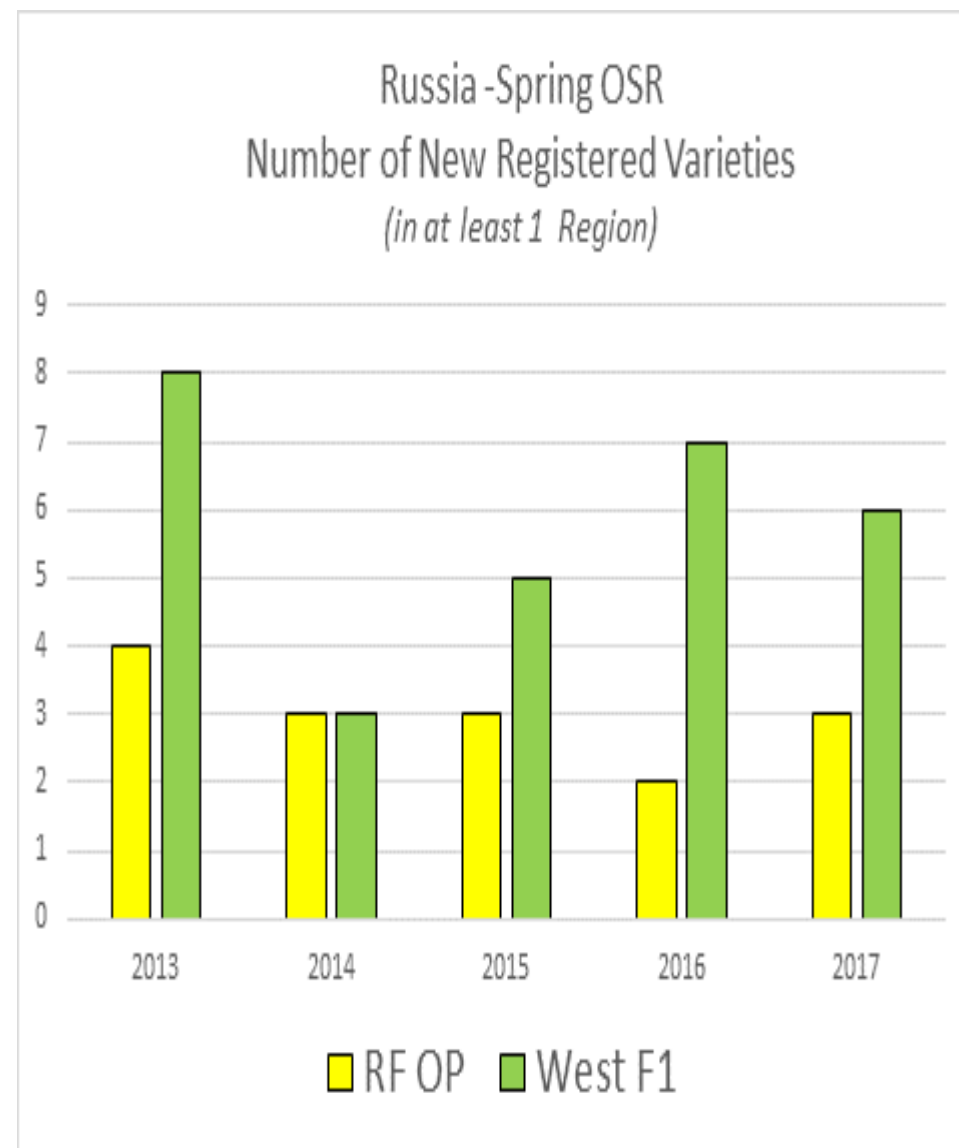
Oilseed rape sowing acreage by regions in 2016, ha

Region	ha		Region	ha	
Northern West region	41.900	WOSR-SOSR	Volga	239.900	SOSR
Central (Black soil, non-black soil regions)	241.900	SOSR – WOSR	Ural	104.400	SOSR
South – Northern Caucasus	73.900	WOSR -SOSR	Siberia	286.700	SOSR
			Total acreage:	995.000	



Spring oilseed rape varieties and hybrids registered in Russia 1988-2017

Year	Spring oilseed rape varieties and hybrids		Total amount
	Russian Institutes (only OP varieties)	Western genetics (mainly hybrids F1)	
	Registered in the Official list, total	Registered in the Official list, total	
1988-1990	2	-	2
1991-1995	8	-	8
1996-2000	13	4	17
2001-2005	5	2	7
2006-2010	7	20	27
2011-2015	17	32	49
Total	52	58	110



Source: State variety commission official varieties list, Ag. Ministry of Russia

Russian institutes activities in oil seed rape breeding



Challenges in oil seed rape cultivation in Russia

Main Challenges:

- average OSR yield rate is still 1.2-1.4 tn/ha!
- low input technology in most regions of OSR cultivation areas;
- high share of Farm save seeds estimated at SOSR -50%, WOSR – 30%;

Environmental condition risks:

SOSR = early spring drought, tough sowing conditions, wet harvesting conditions.

WOSR = moisture deficiency during sowing period in south regions, severe winters in central regions and early spring frost damage.

Pests:

SOSR = insect pressure (*Plutella xylostella* / Diamondback), *Sclerotinia*, *Alternaria*

Perspectives of oil seed rape cultivation in Russia

- ✓ OSR is one of the best pre crop for winter wheat; the total acreage of winter wheat is over 16 Mln ha;
- ✓ Huge acreage of abandoned land, especially in Central, Northern-West regions could be potentially return into a crop rotation with the support of Clearfield hybrids of spring OSR;
- ✓ Farmers of black soil region and other developed regions could increase the yield level of spring OSR by adoption of new hybrids, adopted to tough continental climate conditions;
- ✓ Experience of the leading farms show that modern hybrids of spring oil seed rape could obtain 2,5 to 3 tn/ha (record more than 4 tn/ha).

Perspectives of oil seed rape cultivation in Russia

- ✓ Spring OSR, thanks to its cycle, is the only oilseed crop to be developed in northern west and east regions. Neither soybean nor sunflower are possible to cultivate there.
- ✓ In Siberian regions, Spring OSR has a high potential for growth as still marginal today in the crop rotation.
- ✓ The by-product of processing oilseed rape (oil cake) is a source of local protein, which is actively used by livestock enterprises to replace partly the soya bean cake in diary cattle feeding.
- ✓ Rapeseed oil isn't use today for human nutrition; The main oil for human consumption is still sunflower oil.

Thank you for your attention !

