LIETUVOS
AGRARINIŲ IR MIŠKŲ
MOKSLŲ CENTRAS

Herbicide Resistance: Situation in Lithuania

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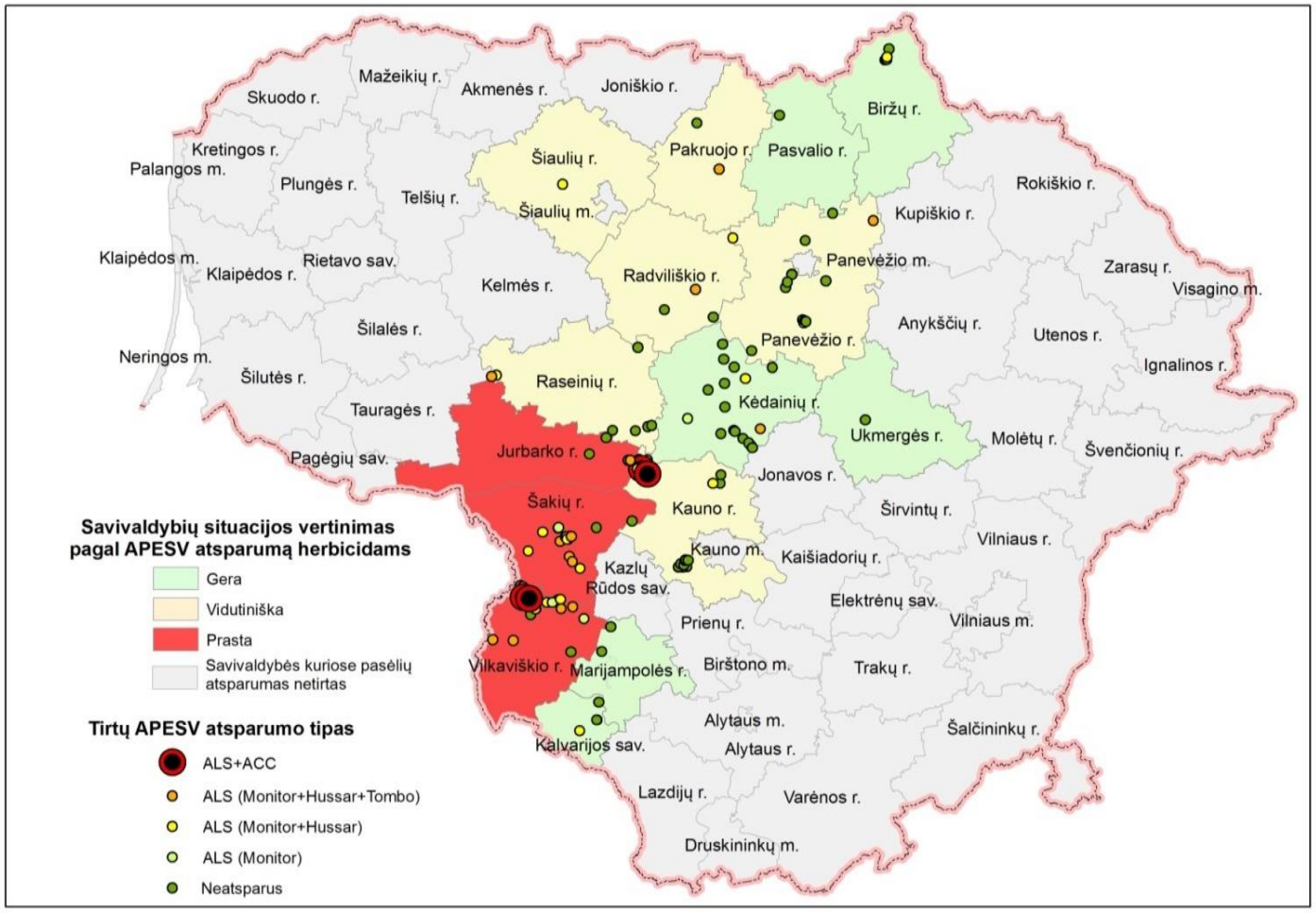
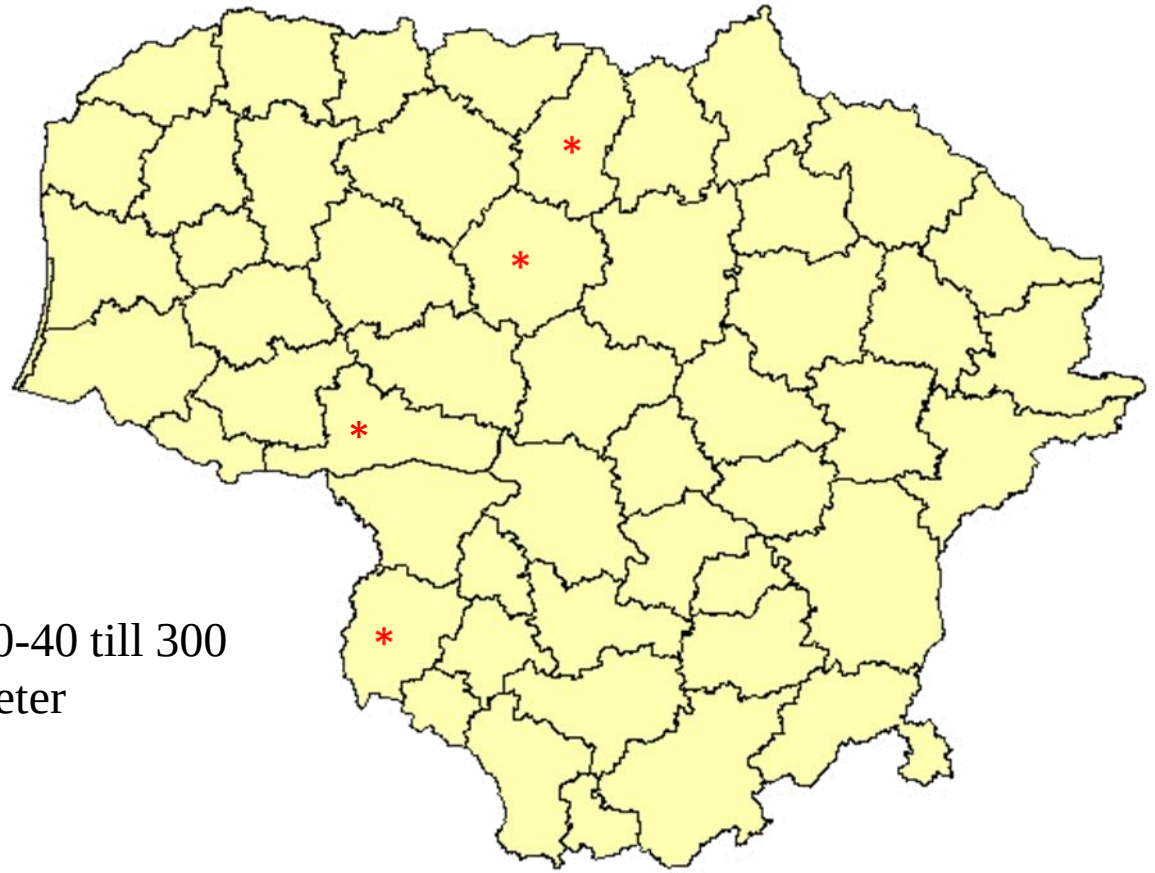
Previous research

- Previous studies showed, that herbicide resistance problem in Lithuania is growing.
- First resistant populations of *Apera spica venti* were obtained in farmer field in 2013
- Till now more, than 150 population from different parts of country were tested and near half was resistant to ALS inhibitors (Auškalnienė et al., 2020)

Distribution of resistant APESV populations in LT

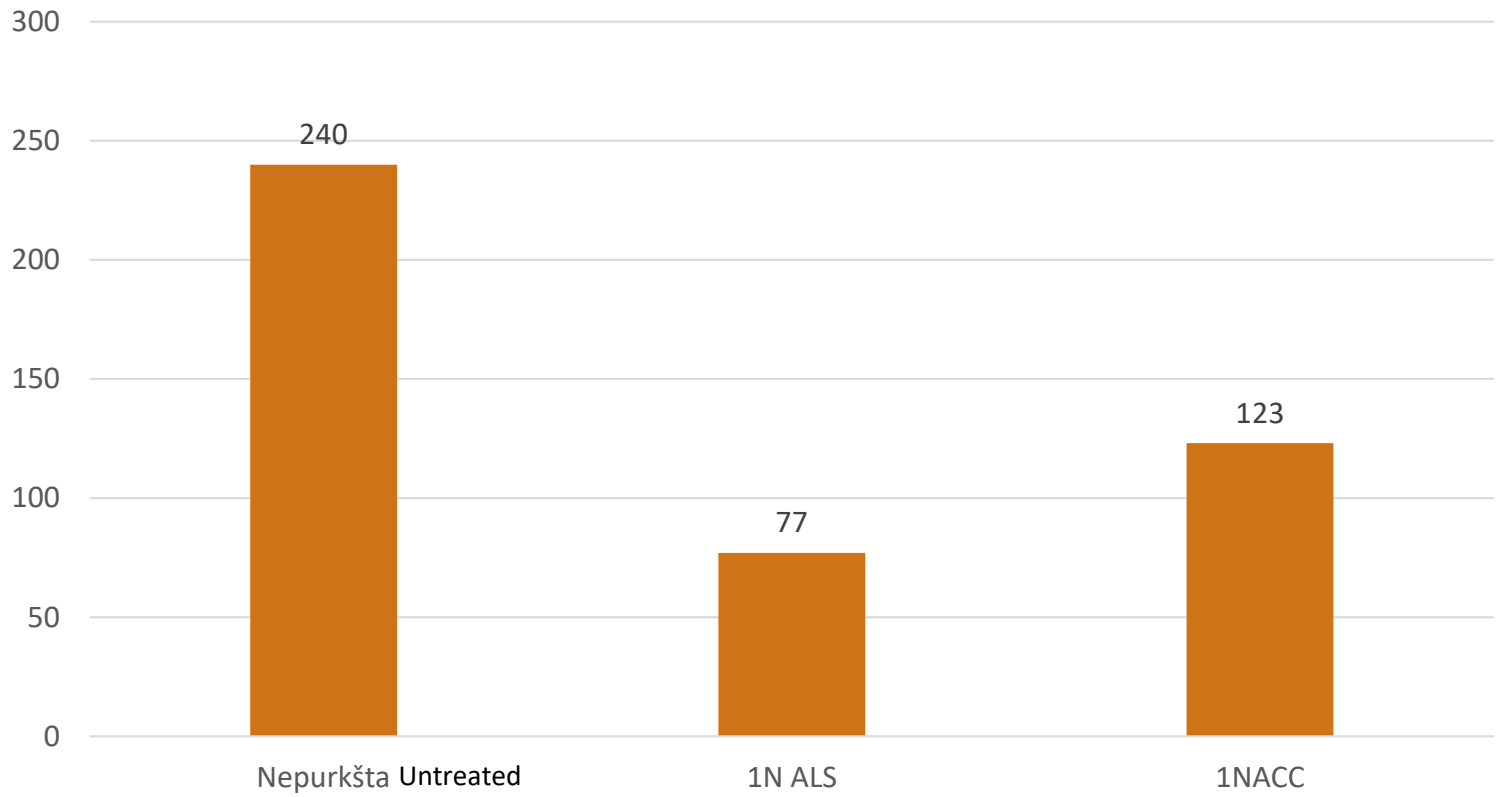


Alopecurus myosuroides



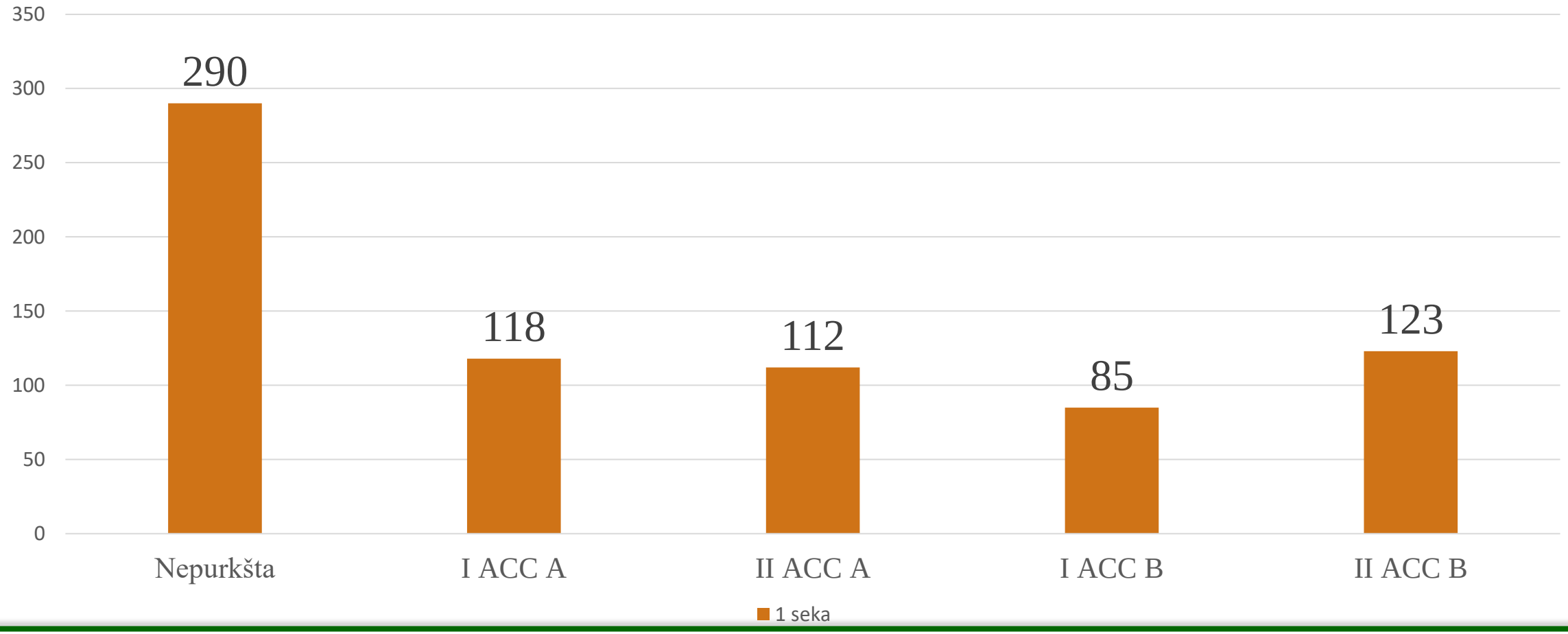
Weed number from 30-40 till 300 – 400 plants per sq meter

The number of ALOMY ears before harvest of winter wheat, 2019



LAMMC

The influence of application timming on ears number of ALOMY
A – early application in spring , B- two weeks later



LAMMC

Resistance test from BAYER laboratory, 2019

		Metabolic resistance		
		Low	Intermediate	High
ALS	Iodosulfuron	20.0 %	0.0 %	80.0 %
ACCase	Fenoxaprop	0.0 %	14.3 %	85.7 %

Dicotyledonous weeds – STEME

STEME

- Low efficacy of ALS inhibitors against this weed;
- Weed control either in autumn, o in spring with other a.i. (not ALS).

Disscussions against Centauria cyanus. Seeds samples were taken

Herbicide efficacy % in autumn

Weed number m2	Efficacy %		
	Prosulphocarb + DFF 2,0 L + 0,15L	Komplet (Flufenacet + DFF) 0,5 L/ha	Legacy Pro (DFF + pendimenthalin + chlortoluron) 2,0L/ha
PAPRH 25	82	92	100
VIOAR 75	100	100	100
APESV 15*	100	100	100
CENCY 4	70	80	96

*before harvesting 50 – 60 ears of APERA

Thank You for Your attention