



## Androstenone levels in pigs originating from different terminal sires

Ivona Djurkin Kušec<sup>1</sup>, Martin Škrlep<sup>2</sup>, Emilija Cimerman<sup>3</sup>, Goran Kušec<sup>1</sup>

<sup>1</sup>Department of Applied Animal Science, Faculty of Agriculture, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia.

<sup>2</sup>The Agricultural Institute of Slovenia, Ljubljana, Slovenia.

<sup>3</sup>Croatian Advisory Service, Zagreb, Croatia.

### Aim:

To investigate the androstenone concentrations in the samples of fat tissue taken from entire male pigs originating from three commercial terminal line sires.

### Material and methods:

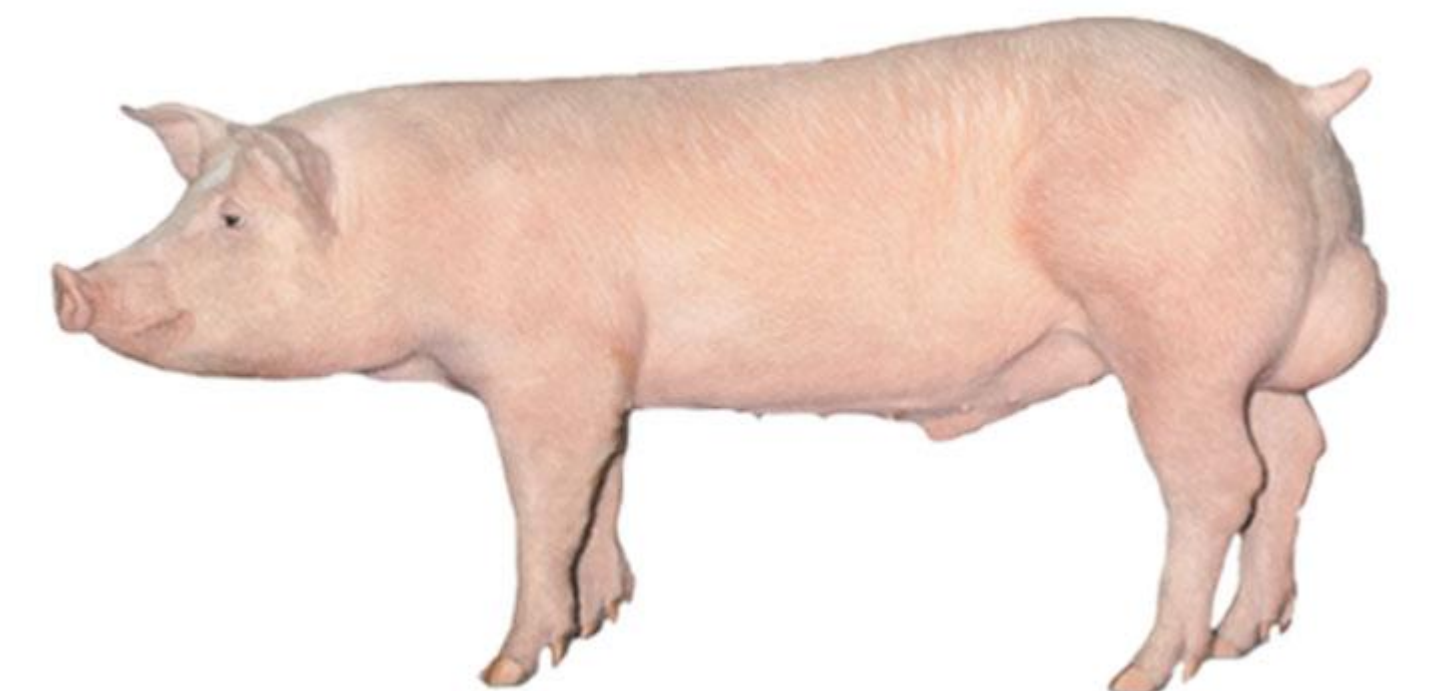
60 entire male carcasses equally distributed into three groups according to the terminal sire line from which they were originating.



Two-way crossing of the Pietrain with the Duroc breed (Pi x Du)



Pure Pietrain (Hal gene excluded, Pi)



Three way crossbred of Pietrain, Duroc and Large White breeds (Pi x Du x LW)

The concentration of the androstenone was determined by liquid chromatography according to the Hansen-Møller (1994) and Pauly et al. (2008); 0.24 mg/g of androstenone was set as the limit of detection.

### Results:

Table 1. Least square means for androstenone concentrations in entire male pigs according to their origin

Concentration (µg/g)	Terminal sire line			SEM	P-value
	Pi x Du	Pi	Pi x Du x LW		
Androstenone	1.07 <sup>b</sup>	1.10 <sup>b</sup>	2.80 <sup>a</sup>	0.29	<0.001

### Conclusion:

The terminal sire line obviously influences the concentration of androstenone and by careful choosing of the terminal sire it is still possible to use commercial hybrids which were not selected on androstenone concentration.