Country Germany

Trait category:	*Individual trait(s):*
Growth & beef	**Daily gain** **Muscularity** **Net gain** **Carcass conformation** **Meat content**

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All breeds restricted to Baden-Württemberg:
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Growth & beef traits	**a)**	**Daily gain**
	b)	**Muscularity**
	c)	**Net gain**
	d)	**Carcass conformation**
	e)	**Meat content**
Breed(s)	a-e)	Bavaria: Fleckvieh, Braunvieh, Gelbvieh
	a-d)	Baden-Württemberg: Fleckvieh, Braunvieh, Vorderwälter
	a,b)	Hessen: Fleckvieh
Trait definition and unit(s) of measuring	a)	Daily gain between 112 and 420 days (for Bavaria and Hessen), between 112 to 350 days (for Baden-Württemberg), and between birth and sale
	b)	Scored on linear 1-9 point scale
	c)	Carcass weight (in grams) divided by age at slaughter (in days)
	d)	Scored on EUROP-grading system
	e)	(Weight of pure meat x 100) divided by carcass weight
Type of recording and evaluation	a)	Own performance at test station or at field (auction sales)
	b)	Own performance at test station or at field (auction sales); progeny test (male) at test station or at test farm
	c)	Progeny test (male) at station (112 to 450 days), at test farm, or at commercial abattoir
	d)	Progeny test (male) at test station, at test farm or at commercial abattoir
	e)	Progeny test (male) at test station or at test farm
Time period for data inclusion	a-e)	Since 1980
Genetic parameters	a)	$h^2_{\text{daily gain (test station)}} = 0.40$ $h^2_{\text{daily gain (field test)}} = 0.15$
	b)	$h^2_{\text{muscularity (test station)}} = 0.40$ $h^2_{\text{muscularity (field test)}} = 0.20$
	c)	$h^2_{\text{net gain (test station)}} = 0.40$ $h^2_{\text{net gain (test farm)}} = 0.33$ $h^2_{\text{net gain (abattoir)}} = 0.13$
	d)	$h^2_{\text{carcass conformation (progeny test station)}} = 0.30$ $h^2_{\text{carcass conformation (test farm)}} = 0.27$ $h^2_{\text{carcass conformation (abattoir)}} = 0.09$
	e)	$h^2_{\text{meat content (progeny test station)}} = 0.57$ $h^2_{\text{meat content (test farms)}} = 0.57$
Sire categories evaluated	a-e)	AI and NS sires
Environmental effect pre-adjustment	a-e)	None

Growth & beef traits *continued*	**a)**	**Daily gain**
	b)	**Muscularity**
	c)	**Net gain**
	d)	**Carcass conformation**
	e)	**Meat content**
Environmental effect evaluation model	a,b)	Own performance on test station: station x season within year, 3 month season Own performance test on field test: market place x season within year, 3 month season
	b,e)	Progeny test on test station: finishing group within test station
	c,e)	Progeny test on test farms: age at start of finishing start (linear regression), finishing group within test farm
	c,d)	Progeny test on abattoirs: farm x finishing year, finishing season within year (subsequent 1 month), parity, multiple birth, visible fat score, age at slaughter (cubic regression)
Base for age adjustment	a,b)	Own performance test: none
	b,e)	Progeny test on test station: none
	c,e)	Progeny test on test farms: age at finishing start - population mean
	c,d)	Progeny test on abattoirs: age at slaughter - population mean
Method (model) of genetic evaluation	a-e)	MT BLUP AM, one evaluation together for all districts
Evaluation system validation	a-e)	-
Expression of proof	c-e)	EBV in original units of measuring Beef index: EBV with M = 100 and SD = 12 2.00 net gain + 30.00 x percentage meat content + 3.60 x carcass conformation
Genetic (reference) base	a,b,d)	Separate traits have a fixed base: all breeding bulls born in 1983-1985 Beef index has a rolling base, all AI bulls born 7-10 before evaluation year
Criteria for official publication of sire proofs	a-e)	REL ≥ 0.30
Number of evaluations/ publications per year	a-e)	Four (for Bavaria and Hessen) Twelve (for Baden-Württenberg)
Use in total merit index	a-e)	No
Key reference on methodology applied	a-e)	Schild, H.J., 1988. Proc. 3rd World Congress in Paris, p. 362-365 Averdunk, G., 1988 SD 852 BLT Grub Wenzler, 1980. Thesis, Hohenheim Werkmeister, 1991. Polycopy, MLR, Stuttgart