

The National Swine Registry Pork Alliance program.

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The National Swine Registry, W. Lafayette, IN working with its members and its advisory committees has developed a Pork Quality Alliance program that allows its members to routinely gather meat quality data on pigs from their herds. Pigs are slaughtered monthly in commercial harvest facilities and meat quality data is measured at 24 h post-harvest. Data collection includes CIE L* (L*), pH and marbling score (MS) (1-10 scale) on the longissimus muscle near the tenth rib location of the ribbed carcass. Data collected through August 2004 consisted of 684 Yorkshire, 577 Landrace and 1240 Duroc records. (Co)variance components were estimated among these three traits with the following model; harvest contemporary group, and sex with animal as a random term using the VCE5 software. Harvest contemporary groups were defined as harvest date nested with herd and breed. For analysis, pH was transformed to hydrogen ion concentration (H⁺). Heritabilities for L*, H⁺ and MS were 0.16, 0.21 and 0.34, respectively. The genetic correlations of L* with H⁺ and MS were 0.05 and -0.19, respectively, while the genetic correlation between H⁺ and MS was -0.39. The phenotypic correlations of L* with H⁺ and MS were 0.18 and -0.07, respectively. The phenotypic correlation between H⁺ and MS was -0.17. The NSR has developed a meat quality evaluation program that allows their members to receive expected progeny deviations for sires, dams and retained littermates of harvested pigs so they can incorporate direct selection for meat quality traits into their genetic improvement program.

Key words: pig, meat quality, genetic parameters.

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