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内蒙古白绒山羊若干数量性状遗传参数的研究 Study on Genetic Parameters for Several Quantitative Traits of Inner Mongolia Cashmere Goats

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摘要　本研究应用女母回归法、公畜内女母回归法、半同胞相关法和单元内半同胞相关法对内蒙古阿尔巴斯白绒山羊的产绒量、绒厚、毛长、体重、绒伸直长度和细度等六个性状的遗传参数进行了估测。结果表明：（1）绒量遗传力介于0.26～0.45之间；绒厚遗传力介于0.33～0.56之间；毛长遗传力介于0.23～0.32之间；体重的遗传力介于0.16～0.36之间；绒伸直长度遗传力为0.24；绒细度的遗传力为0.14。（2）产绒量与绒厚、绒厚与毛长、长度与绒厚、长度与毛长的遗传相关分别介于0.33～0.79、0.51～0.69、0.38～0.60、0.74～0.90之间，存在较强的正向遗传相关；绒量与毛长、绒量与体重、绒厚与体重、细度与绒厚、细度与绒量、细度与体重的遗传相关分别为0.11～0.38、0.06～0.17、0.15～0.36、0.02～0.11、0.24～0.35、0.13～0.32之间，存在较弱的正向遗传相关；毛长与体重、长度与绒量、长度与体重、长度与细度、细度与毛长之间的遗传相关介于-0.14～-0.28、-0.09～-0.20、-0.18～-0.23、-0.27～-0.31、-0.17～-0.28之间，存在中等偏弱的负向遗传相关。（3）绒量、绒厚、毛长、体重的重复率分别为0.42、0.27、0.59、0.18。
Abstract: Daughter-dam regression, daughter-dam regression wit hin sire, half-sib correlation and intro-unit half?sib correlation were used in the study to estimate genetic parameters for several traits of Albas type of In ner Mongolia cashmere goats, Traits included in this paper were cashmere yield (CY), cashmere thickness (CT), staple length (SL), body eight (BW), cashmere stretched length (CSL) and cashmere fineness (CF). The results showed: (1) Heritabilities for CY, CT, SL and BW ranged between 0.26 and 0.45, between 0.33 and 0.56, between 0.23 and 0.32 and between 0.16 and 0.36 respectively; Heritabilities for SL and CF were 0.24 and 0.14 respectively. (2) Genetic correlations between CY and CT, between CT and SL , between SL and CT and between CST and SL ranged 0.33～0. 79, 0.51～0.69, 0.38～0.60, and 0.74～0.90, respectively, and they belonged to high positive one; Genetic correlations between CY and SL, between CY and betw een CY and BW, between CT and BW, between CF and CT, between CF and CY and betwe en CF and BW ranged 0.11～0.38, 0.06～0.17, 0.15～0.36, 0.02～0.11, 0.24 ～0.35 and 0.13～0.32, respectively, and they belonged to low positive correla tion; Genetic correlations between SL and BW, between SL and CY, between SL ?and BW, between? SL and CF and between CF and SL ranged -0.14～-0.28, -0.09～-0 .20, -0.18～-0.23, -0.27～-0.31, and -0.17～-0.28, respectively, and they belonged to low negative correlations. (3) Repeatabilities for CY, CT, SL and BW were 0.42, 0.27, 0.59 and 0.18, respectively.

关键词　内蒙古白绒山羊　数量性状　遗传参数　育种 Key words Inner Mongolia cashmere goats genetic parameter breeding
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Abstract

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