IS IT POSSIBLE TO RECOGNIZE BREED, INDIVIDUALITY AND SEX BY BARKS IN RUSSIAN INDIGENOUS WINDHOUNDS?

RESULTS

1329 BARKS (70 PER INDIVIDUAL)

FROM

8 + 11

MEAN VALUE OF CORRECT ASSIGNMENT 63.5%

RANDOM 3.3%

7 DOGS SHOWED MEAN VALUE 63.5% 7 DOGS SHOWED

VERY HIGH VALUE 66.7%

125 BARKS FROM 120 BARKS FROM 250 BARKS FROM 238 BARKS FROM

SEX RECOGNITION

CHORTAJS BORZOIS CHORTAJS BORZOIS

MEAN VALUE OF CORRECT ASSIGNMENT 88% 85% 82.5% 70% RANDOM 68% 63%

88% 85% 82.5% 70% RANDOM 68% 63%

STABILITY OF INDIVIDUAL FEATURES IN BARKS FROM YEAR TO YEAR

WE TESTED CHORTAJS 3 2

2002 YEAR 300 BARKS (60 PER INDIVIDUAL) ALL DOGS SHOWED VERY HIGH VALUE OF CORRECT ASSIGNMENT TO INDIVIDUAL 80-100%

2003 YEAR 300 BARKS (60 PER INDIVIDUAL) CROSS-VALIDATION ANALYSIS OF BARKS RECORDED IN 2003, USING DISCRIMINANT FUNCTIONS COUNTED FOR BARK SAMPLE OF 2002 SHOWED MEAN VALUE OF CORRECT ASSIGNMENT 42% 39%

638 BARKS FROM 630 BARKS FROM

BREED RECOGNITION

MEAN VALUE OF CORRECT ASSIGNMENT 75% RANDOM 54% 68%

CONCLUSIONS

INDIVIDUAL DIFFERENCES IN BARKS EXCEED SUBSTANTIALLY INTERBREED AND INTERSEXUAL DIFFERENCES IN TWO STUDIED DOG BREEDS

COMPARATIVELY LOW VALUE OF INTERBREED DIFFERENCE IN BARKS COULD BE CONDITIONED BY CLOSE MORPHOLOGICAL, HISTORICAL AND GENETIC SIMILARITY OF THE STUDIED BREEDS. COMPARATIVELY HIGH VALUE OF INTERSEXUAL DIFFERENCES IN BORZOIS BARKS COULD BE CAUSED BY SHOW-SELECTION PRESSURE, APPROVING THE EXISTENCE OF TWO STRICTLY DIFFERENT SEX TYPES.

STRUCTURAL FEATURES IN BARKS VARIED IN STABILITY FROM YEAR TO YEAR IN DIFFERENT INDIVIDUALS. IN ONE CASE WE PROPOSE THAT BARKS OF ONE INDIVIDUAL ADOPTED CHARACTERISTICS OF BARKS OF A SOCIAL PARTNER.