

598.2:591.513.3+612.84

(MUSCICAPA HYPOLEUCA)

(Walls, 1942; Bowmaker, 1977; Govardovskii, Zueva, 1977; Bowmaker, Martin, 1985).

(Lack, 1943; Hailman, 1968; , 1969).

: (. Jacobs, 1981).
(Martin, 1974; Goldsmith, 1980).

(, 1981)
(, 1982).

13 (., 1984).

()

()

()

1984

(10×10)

-10 . 1.

(%) (560) (N) L D.

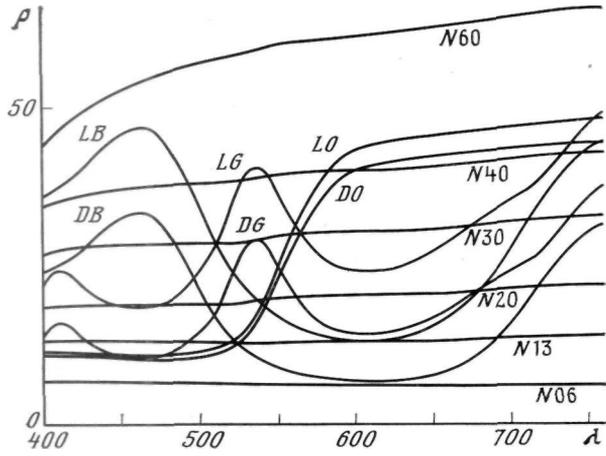
400 4000

()

()

z (, 1980). 1%-

11



1. (LO, DO), (LG, DG), (LB, DB) (%) (N06, N13, N20, N30, N40, N60)

- , , 1982; , - , 1984). (-
 , , -
 , , , -
 , , -
 (« ») . -
 , , « ».
 — -
 , -
 . , -
 (, 1977; - , 1979). (- ,
 , 1982) (- , 1984).
 , -
 ,), (. -
 . : -
 . -
 - DO^{51} , -
 (. 2, ,) . -
 () (). -
 , 1% -
 - , - . -
 . -
 , - 3-
 - 15 , -
 , , -
 . 2, , , . 51 -
 , -
 « » . -

50
N 13.
1,5
(
, 1982; (, 1981;
, 1984):
2,
5
:
(2,).
58
2
20%
N 06, N 20
58
(
58

(, ,), -

, , -
, -

1/3

, , -

:

, -

, -

« » -

58

, -

N 20

DG—

, -

, -

, -

, -

, -

, -

, -

, -

()

, -

, -

, -

, -

, -

, -

(, 1972),

, -

, -

1981. // , 74—78.
1982. (— *Musci-*
hypoleuca)// . . . , 61, 10, 1543—1548. i -
1984. // . . . , 64—70.
1977. . . . : -
 , 1—272.
1980. . . . , 1—294.
1979. -
 // . . . , 7, 50—57.
1969. . . . : , 1—194.
 , 1972. . . . : , 1—487.
- Bowmaker J. K., 1977. The visual pigments, oil droplets and spectral sensitivity of the pigeon//*Vision Res.*, 17, 10, 1129—1138.
- Bowmaker J. K., Martin G. R., 1985. Visual pigments and oil droplets in the penguin, *Spheniscus humboldti*//*J. Compar. Physiol., A*, 156, 71—77.
- Goldsmith H., 1980. Hummingbirds see near ultraviolet light//*Science*, 207, 786—788.
- Govardovskii V. I., Zueva L. V., 1977. Visual pigments of chicken and pigeon//*Vision Res.*, 17, 4, 537—543.
- Mailman J. P., 1968. Spectral reflectance of gull's bill: physiological and evolutionary implications for animal communication//*Science*, 162, 139—140.
- Jacobs G. H., 1981. Comparative color vision. N. Y.: Acad. Press, 1—267.
- Lack D., 1943. The life of the robin. London: Witherby, 1—236.
- Martin G. R., 1974. Color vision in the tawny owl (*Strix aluco*)//*J. Compar. Physiol. Psychol.*, 86, 1, 133—141.
- Walls G. L., 1942. The vertebrate eye and its adaptive radiation. Michigan: Cranbrook Inst. of Science, Bloomfield Hills, 1—453.

()

COLOUR VISION IN PIED FLYCATCHER (*MUSCICAPA HYPOLEUCA*)

E. N. DERIM-OGU, I. Yu. PAVLOVA, V. V. MAXIMOV

Orekhovo-Zuevo Pedagogical Institute, Institute of Problems of Information Transmission, USSR Academy of Sciences (Moscow)

Summary

Pied flycatcher was tested for colour discrimination by using the instinct to feed nestlings, which induces the bird to find its nest under changing conditions, and the technique of alternative choice between the entrances to a double nesting box, marked with coloured stimuli. Birds were trained to differentiate a definite colour (orange, green, blue) stimulus from a given grey, then they were tested for colour stimuli paired with grey ones of different lightness. Testing revealed that birds easily transfer the acquired habit of colour discrimination to stimuli of different lightness without additional training, which is indicative of colour vision in flycatchers.