MICROSATELLITE DNA ASSESSMENT OF MULTIPLE PATERNITY IN THE WHITE-EDGED ROCKFISH, *Sebastes taczanowskii*

Natalia M. Batishcheva, Victoria D. Iagodina, Vladimir A. Brykov
A.V. Zhirmunsky National Scientific Center of Marine Biology Far Eastern Branch, Russian Academy of Sciences, *Primorsky Krai, 690041, Vladivostok;*
e-mail: batishchevanata@gmail.com

Abstract

Some species of the genus *Sebastes* are characterized by polyandry, internal fertilization, and viviparous, which makes them interesting models for testing mating systems and reproductive tactics. The biology of white-edged rockfish, *Sebastes taczanowskii*, is relatively well studied, but the genetic aspects of its reproductive system still remain poorly understood.

Preliminary assessment of the level of polyandry in *S. taczanowskii* based on the results of the Colony 2.0, Gerud 2.0 and Vitassign V.8-5.1 programms

Female	Colony 2.0	Gerud 2.0	Vitassign V.8-5.1
M15	2	2	2
M19	2	2	2
M20	3	2	3
M51	3	2	3
M55	4	2	4
M58	6	3	6
M74	3	2	3
M81	4	2	4
M86	3	2	3
M88	4	2	4

Results and discussion

Our results demonstrate for the first time the putative presence of multiple paternity in the white-edged rockfish. The obtained data on the number of sexual partners are important for understanding the evolution of models of sexual selection and reproductive behavior in Far Eastern rockfish and allow further comparison of the levels of polyandry in different species within the same genus.

Materials and methods

Research materials were 10 pregnant females and juveniles collected by dissecting the females' gonads

The level of polyandry reported for other rockfish species

Rockfish species	Number of sires (maximum)
S. atrovirens	3
S. brevispinis	3
S. diploproa	3
S. elongatus	4
S. goodei	3
S. jordani	3
S. proriger	3
S. ruberrimus	4
S. rufus	3
S. melanops	4
S. schlegelii	6
S. maliger	3
S. alutus	4
S. caurinus	2
S. inermis	2