عنوان مقاله:

Effects of cortisol treatment and ovaprim treatment on sex steroid hormones, plasma and oocyte cortisol content and ovulation induction in Caspian kutum, Rutilus frisii (Kamansky, ۱۹۰۱) broodstocks

محل انتشار:

مجله علوم شیلات ایران, دوره 19, شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 11

نویسندگان:

.A. Sarpanah - *Agricultur Research, Eduction and Extention Organization, Tehran, Iran. Tehran, Iran*

H. Monsef Kasmaie - *Expert of Fisheries Department, Institute of Technical and Vocational Higher Education, .Agriculture Jihad- Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran*

M. Yasemi - *Associated Professor, Institute of Technical and Vocational Higher Education, Agriculture Jihad- .Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran*

M. Abedi - *Member of Science, Institute of Technical and Vocational Higher Education, Agriculture Jihad- Agricultural .Research, Education and Extension Organization (AREEO), Tehran, Iran*

خلاصه مقاله:

Caspian kutum fish (Rutilus frisii) wild broodstocks were caught by gillnet during their upstream migration and subjected to short-time confinement stress and their physiological responses have been examined. Thirty fish (average weight of ۱۲۱۷.۶ g) were divided into three experimental groups CO (control), OV (ovaprim) and CO+OV (cortisol+ovaprim) and placed into rearing tanks (۱۰ fish tank-۱; ۲ m۳ each) and kept for ۱۰ days. Fish in CO+OV group received a single cortisol injection (۲۰ µg kg-۱ B.W.) before being transferred in tank. After ۱۰ days of confinement, all fish in OV and CO+OV groups were injected by ovaprim (۲۰ µg kg-۱ B.W.) to induce maturation and ovulation. Plasma cortisol in CO+OV fish have showed a gradual decrease during confinement and reached to the lowest level after maturation (ovulation) while the highest values for glucose has been found in OV group ($p<۰.۰۵$). Testosterone and ۱۷β-estradiol levels declined significantly in all experimental groups following cortisol treatment and maturation, while no significant difference had been found in the content of plasma progesterone among brood-stocks ($p<۰.۰۵$).The concentration of oocyte cortisol in CO+OV was ۲-fold higher than that of CO and OV after maturation. These results indicated that cortisol treatment with subsequent ovaprim injection decreased plasma sex steroids and increased .oocyte cortisol content in confined broodstocks but had no effect on oocyte histological characteristics

کلمات کلیدی:

Cortisol treatment, Ovaprim, Sex steroids, Oocyte, Broodstocks, Rutilus frisii

لینک ثابت مقاله در پایگاه سیویلیکا: