

عنوان مقاله:

DNA PCR Amplification for Species Diagnosis of Caviar from Caspian Sea Sturgeon

محل انتشار:

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خلاصه مقاله:

Samples from five sturgeon species including Persian sturgeon (*Acipenser persicus*), Russian sturgeon (*A. gueldenstaedti*), Great sturgeon (*Huso huso*), Ship sturgeon (*A. nudi-ventris*) and Stellate sturgeon (*A. stellatus*) were collected from the South Caspian Sea. DNA was extracted from the fins, eggs and skeleton muscle of the five species. RAPD markers were used for identifying different kinds of black caviar and sturgeon meat. The polymorphic band from RAPD amplification of DNA from two out of five sturgeon species was purified, cloned and sequenced. RAPD analysis was carried out in order to compare the five species using an operon primer set. Sequence Characterised Amplified Region (SCAR) primers were designed and used to amplify caviar DNA from five sturgeon species. A marker of potential economic importance was discovered that is able to distinguish three species from caviar and also to distinguish Ship sturgeon caviar from osetra caviar (from Russian and Persian sturgeon) and also other species. This marker could assist international conservation and legal efforts to save what is left of the commercial Ship sturgeon populations which are endangered and whose caviar is at present substituted for the more expensive osetra caviar.

کلمات کلیدی:

Caspian Sea, DNA Marker, Sturgeon Species

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