**Japetella diaphana** Hoyle, 1885

**Family Bolitaenidae**

**Characters** Arm armature consists of one sucker per row [1]; suckers without chitinous rings; eyes circular-shaped [2], although less so in young specimens; relatively short eyestalks; funnel stout; fins absent; body gelatinous; mature females have a bioluminescent yellow to yellow-green photophore encircling the beak [3]; iridophores present on head and arms [4].

**Color** Transparent to dark red.

**Life History** Mature females collected from the west coast; mature males unknown from this area; paralarvae common from the west coast and Gulf of Alaska.

**Maximum Size** 10 cm mantle length.

**Depth Range** 200 to >1,500 m.

**Habitat** Pelagic.

**Prey** Small fishes and crustaceans.

**Predators** Likely fishes and squids.

**Industry Uses** None.

**Comments** This pelagic octopus is easily damaged during sampling and the gelatinous body often is mistaken for a squid. The suckers are octopodian and lack chitinous rings and the mantle is attached to the head dorsally. This is a very common octopus in the Gulf of Alaska.

**Similar Species** Can be confused with *Bolitaena pygmoea*. Both are pelagic octopods with one sucker per row on the arms. The easiest way to differentiate the two species is by the shape and size of the eye. The eye of *Bolitaena pygmoea* is oblong and smaller on a long eyestalk, while the eye of *Japetella diaphana* is more circular and larger on a shorter eyestalk.

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**Benthotopus leioderma** (Berry, 1911)

**Family Octopodidae**

**Smoothskin Octopus**

**Characters** Arm armature consists of suckers biserial; web depth moderate; web extends down arms [1]; mantle smooth except lateral ridge, can be seen as a ridge or a green line [2]; this character is ephemeral and will begin to disappear if an animal is injured or dying.

**Color** Orange to purple.

**Life History** Unknown; eggs and paralarvae have not been collected.

**Maximum Size** 16 cm mantle length.

**Depth Range** Deeper than 500 m along the west coast to the Gulf of Alaska; deeper than 150 m in the Bering Sea.

**Habitat** Epibenthic on muddy to rocky bottom types.

**Prey** Fishes, crabs, and other small crustaceans.

**Predators** Halibut, skates, and other benthic fishes throughout its range; sea lions and fur seals in the shallow portion of its range.

**Industry Uses** None; however, it is taken as bycatch in bottom trawl fisheries.

**Comments** Evidence suggests that this name has been applied to two species; resolution will depend on further study.

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**Geographic Range**

*Japetella diaphana* Southern California to the Gulf of Alaska, Aleutian Islands, Bering Sea slope.

*Benthotopus leioderma* West coast to Bering Sea.