SCAMIT CODE:

SCCWRP 68

Date Examined: June 9, 1986

Voucher By:

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SYNONYMY:

Pecten (Delectopecten) randolphi tillamookensis

Arnold 1906

<u>Pecten (Delectopecten) arces</u> Dall 1913 <u>Delectopecten tillamookensis (Arnold 1906)</u>

LITERATURE:

Grau 1959

Bernard 1983

DIAGNOSTIC CHARACTERS:

1. Both valves convex but relatively flat; right valve not ventrally flexed.

- 2. Without internal ribs. All "ribs" composed solely of radial surface sculpture.
- 3. Translucent (transparent in youngest, semi-opaque in thickest old shells) white.
- 4. Posterior auricles poorly defined continuous with disk outline.
- 5. Ctenolium of 4-5 teeth.
- 6. Internal ridge on posterior auricle of left valve.
- 7. Heavily sculptured with radial and concentric threads of nearly equal strength in adults, often with spined intersection (both valves). Typical sculpturing absent in young (less than 5 mm) specimens.

RELATED SPECIES AND CHARACTER DIFFERENCES:

<u>Delectopecten randolphi randolphi - unsculptured as both juveniles</u> and adults other than low vermiculate "camptonectes" sculpturing; also lacks internal ridge on left valve posterior auricle, otherwise nearly identical.

<u>Delectopecten vancouverensis</u> - posterior auricles better defined, not continuous with disk.

DISTRIBUTION: Bering Sea to Cadros Islad; 50-1100 m.

COMMENTS:

This subspecies differs from <u>randolphi</u> s. str. in only two characters - the external scultpure and internal ridge. Because

all other characters are essentially the same, Bernard reduced it to synonymy. Abbott (1974) has taken the opposite tack, listing tillamookensis at species level. We here follow a conservative middle path in recognizing a subspecies which has a few clear morphological differences, but no obvious mechanism isolating it from the sympatric randolphi s. str. Future research will probably invalidate the subspecies but since neither submergence or elevation is a clear choice we follow Grau's usage.

