

TAXA

All EGG Types, Known and Unknown

Oct 4, 1994

(Taxa listed alphabetically, Unknown types listed in numerical sequence)

Measurements for egg chorion and oil globule diameters were made to the nearest 0.01 millimeter. Sizes within parentheses represent minimum and maximum values observed.

Ammodytes spp. .81 (.77-.98) x .75 (.69-.92), og .19 (.18-.22), (Fahay 1983 reports og=.27); irregular shape, not quite spherical.

Anchoa hepsetus 1.50-1.63 (1.34-1.76) x .78-.87 (.73-.92); oval; no oil.

Anchoa mitchilli .88-.92 (.77-.99) x .73-.80 (.70-.85); oval; no oil.

Argentina silus 3.27-3.35 (3.01-3.47), og (1.06-1.29).

Brevoortia tyrannus 1.45-1.64 (1.44-1.81), og .15-.16 (.14-.18); wide perivitelline space; segmented yolk; melan tiny and occur in 2 dors-lat rows from head to tailtip.

Brosme brosme 1.28-1.31 (1.15-1.46), og .26-.28 (.24-.30); egg membrane finely pitted; melan dend and closely spaced in 2 distinct dors-lat rows.

Citharichthys/Etropus spp. .62-.74 (.55-.77), og .10-.14 (.07-.15); punct melan head to tailtip, some in finfold, few on yolk.

Clupea harengus 1.25-1.29 (1.20-1.35); no og; thick chorion, usually irreg shape.

Cynoscion regalis .69-.90 (.63-.94), og .18-.24 (.17-.26); densely scatt melan (ea-late), fewer later, mid-dors row; dark melan scatt on og.

Enchelyopus cimbrius .76-.88 (.66-.92), og .12-.20 (.09-.21); often sticky and float; melan relatively few, large and longitudinal.

Engraulis eurystole 1.02-1.25 x 0.50-0.80; segmented yolk; no pigm.

Gadus morhua 1.30-1.49 (1.20-1.64); no oil.

Glyptocephalus cynoglossus 1.27-1.34 (1.10-1.44); no oil.

Hippoglossoides platessoides 2.06-2.38 (1.80-2.67); no oil; wide perivitelline space.

Lophius americanus dbl memb, (1.43-1.70)= inner diam [outer membrane deciduous and might not be present], [outer diam=(1.60-1.90)]; og (.42-.50); spawned in veil of thousands of eggs.

Lopholatilus chamaeleonticeps 1.28-1.39 (1.28-1.41), og .19-.21 (.17-.24); pigm largely ventral on tail.

Maurolicus muelleri 1.54 -1.59 (1.37-1.75), inner .88-.89(.84-.92), og .23-.24 (.21-.25); double membrane, outer strongly sculpted, yolk segmented; no pigmentation (to 7/8~); slender embryo.

Melanogrammus aeglefinus 1.28-1.50 (1.22-1.61); no oil.

Merluccius albidus 1.06-1.11 (.99-1.21), og .31-.37 (.28-.38); usually sticky and float; dark and blotchy melanophore pattern; melan on embryo, oil g, finfold and yolk; melan on yolk in broad patches near anterior 1/2 of embryo.

Merluccius bilinearis .86-.97 (.81-1.03, to 1.13), og .23-.28 (.22-.31); usually sticky and float; melan on embryo, oil g, finfold and yolk; melan on yolk tend to be in broad patches near anterior 2/3's of embryo.

Ophichthus cruentifer 2.30-2.63 (2.10-2.81); og .30-.42 (.26-.55); wide perivitelline space; anguilliform; no pigm; newly spawned eggs are smaller (1.90+mm).

Paralichthys dentatus .97-1.02 (.92-1.07), og .19-.23 (.17-.24); dend melan scatt on embryo, og, finfold and yolk; on embryo melan tend to form a distinct mid-dorsal row.

Hippoglossina oblonga .84-1.03 (.79-1.08), og .14-.17 (.11-.20); punct melan on embryo, finfold, og and yolk; melan on yolk in broad patches near anterior 2/3's of embryo.

Peprilus triacanthus .71-.82 (.67-.84), og .17-.22 (.15-.25); melan (faint) head to tailtip, mostly in neural grooves, a couple may be ventral on post 1/4 body, a couple lat at mid-body.

Pleuronectes americanus .80-.82 (.73-.95) x .75-.81 (.69-.84); no oil; thick chorion.

Limanda ferruginea .82-.92 (.76-.96); no oil.

Pollachius virens .99-1.14 (.94-1.17); no oil.

Pomatomus saltatrix .87-.97 (.83-1.09), og .22-.29 (.19-.30); relatively large and dark melan snout to tailtip; may be a couple melan onto yolk in pect area; prominent dark melan just above anus.

Prionotus sp .93-1.08(.87-1.16); multi og; og no. 11-15 (6-25); og diam .08-.13(.04-.18); chorion often with red tint; dend (filmy and faint) melan on embryo, yolk, and patches in dors and anal finfold.

Rachycentron canadum 1.23 (1.18-1.27). og .32 (.27-.34); densely scatt melan ant to eyes (patch on snout); densely scatt dark melan on body dors and dors-lat and vent-lat to 95% BL; melan on og, but not in finfold or on yolk (5/8~).

Sarda sarda 1.19-1.26 (1.18-1.37), og (max=.27); og almost always multiple (2-10, or single and broken ?); tiny, punct and sparse melan.

Scomber scombrus 1.12-1.27 (1.07-1.35), og .29-.33 (.25-.35); melan dend and dark, snout to tailtip, and on og; none in finfold or on yolk (except 1 or 2 tight alongside pect area).

Scophthalmus aquosus .96-1.20 (.92-1.29), og .16-.22 (.14-.23); stell to dend melan densely scatt snout to tailtip; melan broadly scatt on yolk and into finfold.

Stenotomus chrysops .92-.97 (.89-1.02), og .18-.23 (.18-.25); melan generally dors, dend and somewhat sparse.

Symphurus spp. .57-.64 (.54-.66); multi og, og no. 7.4 (5-11); og diam .06 (.05-.07).

Tautoga onitis .96-1.10 (.95-1.14); no oil.

Tautogolabrus adspersus .84-.96 (.78-1.00); no oil.

Trinectes maculatus (.70-.79); multi og, og no. (15-20); og diam [no info].

Uranoscopidae 1.47-1.59 (1.40-1.71), og .27-.33 (.22-.35); very fine sculpting or pitting of surface.

Urophycis spp. .67-.76 (.63-.83), og .17-.23 (.15-.26); distinct dark melan on embryo, yolk and oil g.

Zu cristata (2.30); no oil.

Unk #63: .91-.95 (.88-.99) x .85-.92 (.81-.95); no oil; almost spherical to oval, some collapsed; virtually no pigm.

Unk #67: .87-.93 (.83-.97), og .22-.26 (.21-.27); approx 45 myomeres; punct melan in 2 precise dors-lat rows to tailtip.

Unk #86: (2.70); multi og; og no. [no info]; og diam (approx .05); no pigmentation (?).

Unk #90: .80-.91 (.77-.95), og .14-.16 (.13-.18); og anterior (late); melan relatively few and dark, dors and vent; melan into ffold at 3/4~.

Unk #91: 1.01-1.03 (.99-1.10) x .97-.98 (.93-1.03); no oil; almost spherical, slightly oval; numerous tiny melan on embryo.

Unk #95: .74 (.72-.88); multi og, og no. (15-20); og diam [no info]; punct melan scatt dors and lat snout to tailtip; scatt on yolk.

- Unk #99:** .62 (.59-.70); multi og, og no. (7-14); og diam (.04-.08); no pigm at 5/8~; light dors pigm on embryo and melan in dors and anal finfolds at full~; membrane may have reddish tint.
- Unk #106:** .91-.94 (.88-.95), og .17(.10-.19); yolk segmented, approx 45-50 myomeres; melan only in caudal finfold at 1 1/16~.
- Unk #113:** (2.14-2.30); no oil; segmented yolk.
- Unk #125:** 1.64-1.72 (1.51-1.79) & 1.60-1.68 (1.48-1.73); dbl memb; no oil; no pigm (1 1/4~); anus at 7/8 BL.
- Unk #126:** Dbl memb, .96 (.89-.99) and .88 (.82-.92); no oil; segmented yolk; no pigm (1/2 - 5/8~).
- Unk #127:** .90-.97 (.89-1.00) x .90-.93 (.84-.97); no oil; most are non-spherical; pigmented, numerous minute melan [more pigm than Unk #63].
- Unk #134:** (.69-.75); no oil; segmented yolk; no pigm (7/8~).
- Unk #140:** (.74), og (.21), segmented yolk, pustules on shell, melan on embryo, oil g and yolk.
- Unk #147:** .92-.93 (.89-.96), og .25-.26 (.22-.26); oil g anterior; melan lat to h-brain then post as 1 mid-dors row; a few in anal finfold.
- Unk #148:** (approx 1.34 ?), og (.46); no pigm except on eyes (1 1/8~).
- Unk #152:** (.92-.96), og (.23); slender embryo; at ea-late, melan from behind head to tailtip.
- Unk #156:** 1.08 (1.08-1.11), og .23 (.23); sparse and punct melan scatt dors to about 3/4 BL; couple on ventrum post to anus; none on yolk or in finfold (3/4-7/8~).
- Unk #168:** .68-.72 (.66-.73), og .16-.17 (.15-.18); small melan snout to tailtip; og larger than *Citharichthys/Etropus* spp.
- Unk #169:** .82 (.82-.83), og (.12); 50+ myomeres; no pigmentation (3/4 - 7/8~).
- Unk #170:** Dbl memb, .71 (.69-.74) and .68 (.65-.72); no oil; segmented yolk; no pigm (5/8~); slender embryo.
- Unk #173:** (.93-.99), inner (.89-.95), og (.10); double membrane, yolk segmented.
- Unk #175:** Dbl memb, 1.84 (1.80-1.91) and 1.72 (1.71-1.77); no oil; h-gut long and bifurcated; faint punct melan (at 1 1/2~) on ventrum of body, on h-gut and in eyes.
- Unk #176:** .68-.70 (.64-.73), og .16-.19 (.15-.21); sparse melan on embryo, prominent patch on proximal surf of oil g.

- Unk #178:** .75-.77 (.73-.78), og .17-.18 (.15-.19); yolk finely segmented in part; melan on head, lat to h-brain then converge to dors mid-line.
- Unk #179:** (.68-.77), og (.20 or less); scatt dend melan on embryo, og and yolk.
- Unk #180:** .73-.81 (.71-.84), og .19-.24 (.18-.24); very similar to *Peprilus* but occurs in the fall.
- Unk #181:** (1.40-1.50); multi og, og no. [no info]; og diam [no info]; pigmentation information lacking.
- Unk #183:** .62-.64 (.62-.64), og .13 (.11-.13); og ant (late); dors-lat patches on caudal peduncle, and other melan.
- Unk #184:** (1.07-1.10), og (.15-.21); "numerous" myomeres; pigm is restricted to a small cluster of melan ventral to tailtip (3/4-7/8~).
- Unk #185:** .65 (.64-.70), og .13 (.11-.15); melan tiny, present on head, over h-brain and on ventrum of post 1/3 body, none in ffold.
- Unk #186:** (.79); multi og, og no. [no info]; og diam [no info]; "lots of pigmentation on embryo".
- Unk #187:** (.50), og (.10); sculpted; (Myctophidae?).
- Unk #191:** 1.89 (1.83-1.95), lesser diam 1.76 (1.60-1.76), og (.53); oval shape; pigm present (descriptive info lacking).
- Unk #193:** (.77); multi og; og no. (approx 35); og diam [no info]; pigm info lacking.
- Unk #195:** (3.10-3.11); no oil; advanced development at 5/8~; numerous punct melan on ant 2/3 body.
- Unk #198:** (1.03-1.10); multi og; og no. (10); og diam (.06-.08); wide perivitelline space; egg membrane with internal pustules; punct melan on dors, a few vent; sparsely scatt on yolk.
- Unk #199:** .68-.76 (.65-.79), inner .60 (.60-.61), og (.20-.23), Double membrane, sculpted, outer memb deciduous.
- Unk #200:** .79 (.75-.84), og .22 (.20-.23); yolk homog or perhaps finely segmented; melan on embryo and yolk; distinct small patch on ventrum of yolk.
- Unk #201:** 1.16 (1.11-1.18), dbl memb, inner 1.12 (1.05-1.14), og .32 (.30-.35); segmented yolk; no pigmentation at 1/2~.
- Unk #202:** (.73-.76), og (.20); "snout patch" of melan, other melan head to tailtip; at full~ a "saddle" of melan at 3/4 BL.

- Unk #203:** 1.52-1.67 (1.48-1.68), og .37-.41 (.35-.41); copper tint to chorion; smooth chorion; numerous myomeres; three distinct pairs of melan patches (head, post to h-brain and at 9/10 BL).
- Unk #204:** (1.50), og (.38); 70-80 myomeres; melan dend and light, occur on embryo, finfold, yolk and oil g; melan conspicuous on head in neural grooves and as a thin, but dark mid-dors line at mid-body extending over 1/10 BL.
- Unk #205:** 1.48 (1.45-1.53), og (.10-.12); very low relief sculpturing (orange-peel like surface).
- Unk #206:** 2.79-2.93 (2.74-2.95), og .21-.25 (.19-.30); approx 125 myomeres; wide perivitelline space; anguilliform; see description.
- Unk #207:** (.88-.90); no oil; a few faint melan on post 1/2 body (at 5/8~).
- Unk #208:** .78-.79 (.78-.80), og .18-.22 (.18-.23); segmented yolk.
- Unk #209:** (1.78), og (.10); no pigm at mid-middle.
- Unk #210:** .82 (.78-.85), og .15 (.15-.19); yolk strongly segmented, no pigmentation at 7/8~.
- Unk #211:** sculpted (coarsely); pt-to-pt 1.03-1.04 (.96-1.08), smooth .99-1.00 (.94-1.03); no oil; pigm like a lightly pigm *T. onitis*.
- Unk #212:** sculpted (finely); pt-to-pt 1.30-1.32 (1.18-1.39), smooth 1.27-1.30 (1.21-1.37); no oil; two dors-lat rows of melan.
- Unk #213:** 1.47 (1.42-1.52); multi og; og no. (10-15); og diam (.10-.15); darkly pigm areas on head and striking band at about 2/3 BL; yolk densely pigm; pect buds pigm. (Soleidae?).
- Unk #214:** (1.41); no oil; at 7/8~ broad head, heavy-bodied embryo, fan-like pectorals; punct melan lightly scatt on head, body and fins.
- Unk #215:** (1.00-1.03), og (.25-.27); approx 45-50 myomeres; prominent melan patch on snout; dark melan post to eyes, lat to h-brain, post as 2 dark dors-lat rows; also a ventral row from abdomen to 9/10 BL.
- Unk #216:** 1.01 (.98-1.05), og .22 (.21-.26); Paralichthys-type pigment, geography and season preclude calling this *P. dentatus*.
- Unk #217:** .76-.80 (.74-.81); no oil; segmented yolk; no pigment (at full~).
- Unk #218:** .82 (.80-.84); og .15 (.14-.15); melan on embryo and oil g; distinct small cluster of melan on dorsum of oil g.
- Unk #219:** Dbl memb; (.78), inner (.70), og (.21); no pigment at 5/8~.

- Unk #220:** Dbl memb; (1.10-1.28), inner (1.07-1.09), og (.28-.35); yolk strongly segmented; no melan at 7/8~ .
- Unk #221:** (.82), og "small"; yolk strongly segmented.
- Unk #222:** sculpted (finely ?); pt-to-pt 1.24 (1.22-1.25), smooth 1.18 (1.16-1.20); no oil; dend melan scatt lat and ventrally; spot on vent.
- Unk #223:** .74 (.72-.76), og .14 (.13-.16); og ant-vent at 7/8~; yolk homog to finely segm; pigment like *T. adspersus*, but with og.
- Unk #224:** 2.22 (1.96-2.29), og .31 (.30-.32); 100+ myomeres; yolk may be finely segm; anguilliform; see description.
- Unk #225:** (1.20), og (.29); approx 75-80 myomeres; a few melan on snout, a few on dorsum of gut, a prominent pair of vent-lat melan at 7/8 BL, a few in loose patch on yolk beneath head, and a few scatt on oil g (15/16~).
- Unk #226:** (.97), og (.22); tiny punct melan (few), scatt on head and dorsum of mid-body area; none in finfold or on yolk (9/10~); a few on og.
- Unk #227:** (.93-.96); multi og, og no. (15-20); og diam (.04-.07); One ventral melan. at 9/10 BL (at 7/8~).
- Unk #228:** .83 (.80-.84), og (<.23, exp); some slightly oval and some slightly collapsed; a narrow embryo; melan on embryo and yolk (on oil g?).
- Unk #229:** (2.40-2.57); no oil; sculpted (very finely); numerous myomeres; melan on ant 1/2 embryo and in large patches on yolk.
- Unk #230:** (.90), og (.19); no pigmentation (5/8~).
- Unk #231:** (.82), og (.23); pigm like a lightly pigmented *C. regalis* but with melan on yolk.
- Unk #232:** (1.42), og (.30); yolk partially segmented? ; approx 35 myomeres; broad finfold (1 1/8~); melan dors-lat rows on head; then dors, lat and vent to anus; then post as dors and vent double rows; on yolk melan in large patches near head and abdomen.
- Unk #233:** .76-.77 (.73-.83); no oil; yolk homogeneous and opaque (or perhaps finely segmented); scatt dors and dors-lat melan, couple ventral; melan scatt on yolk vent or ant.
- Unk #234:** (.91-.93), og (.15); at 3/4~, a very few punct and tiny melan, on dorsum of head and abdomen, couple lat at mid-body, couple in anal finfold; anus at 3/4 BL; approx 50 myomeres.
- Unk #235:** (.86); no oil; myomeres approx 40; at ea-late few (14), tiny, punct and faint melan on dors and dors-lat aspects of abdomen.

Unk #236: .89-.91 (.87-.94), og .23 (.21-.25); approx 43-44 myomeres; punct and dark melan on embryo and on dors 1/3 oil g.

Unk #237: (.84), og (.20); yolk segmented(?), melan large, dark and few; melan paired on head and in single mid-dors row over middle half of body; no ventral melan; small patch or single large melan on yolk ventrum.

Unk #238: (1.98); no oil; wide perivitelline space; segmented yolk; slender embryo; no melan (full~); myomeres approx 55+30 to 40; gut ends at approx 7/8 to 9/10 BL.

Unk #239: (1.80), og (0.36); slightly non-spherical; egg membrane opaque, hard, and yellowish; yolk indistinctly segmented; no pigmentation (3/4~); head large in comparison to rest of embryo.