117. Actinonema pachydermatum n. sp. Cuticle naked, very thick, occupying one-half the radius as measured at the base of the neck. Annules alike except

 $\frac{50^{-2}}{4.2} = \frac{81}{2.5}$, 83 that they grow narrower toward the except Ъß ¹⁵450,¹⁵ . 35 8.6 _16. 3.3 the extremities, especially the head on ? $\frac{9.2}{2.4} - \frac{16}{2.7} - \frac{44}{2.9} = \frac{85}{2.5} > 9$ end; resolvable with difficulty into rod-like markings,—with less diffi-2.4 amph culty on the anterior half of the body. The prominent wings, begin-SDN ning on the neck, end near the middle of the tail. As there are deep, narrow grooves between the annules, the contour of the body is irreg-×750

ularly crenate. Head set off by contraction and a deep constriction, subtruncate; mouth more or less depressed. The lip-region is one-half as high as wide, and appears to be composed of three fairly well developed, rounded, subdistinct lips, which are set off by constriction. This lip-region appears as if protruding from within the thick cuticle, and stains in carmine while the cuticle remains quite colorless. On the lips there are no obvious signs of a cuticle. The pharynx is very small and inconspicuous, or even absent apparently. There seems to exist, however, a minute, more or less arcuate dorsal onchium, to be seen in balsam specimens only when exserted. The neck is conoid, the head convexconoid. Amphids nearly straight transverse slits, four-fifths as long as the corresponding diameter of the head, and apparently eight times as long as wide. One of the foremost annules appears to be more or less dislocated;—that is to say, the regular succession of the fore-most annules is somewhat disturbed by



0E

 g_{0} the presence of the amphids, which are otherwise almost invisible. Oesophagus more or less conoid, but decidedly clavate posteriorly. Near the head it is two-fifths, near the nerve-ring about one-fourth, and finally one-half, as wide as the corresponding portion of the neck. There is no distinct cardia. The rather thin-walled intestine, which becomes at once two-fifths as wide as the body, has a distinct lumen. Its cross-section presents four to six cells. Cardiac collum one-fifth as wide as the body. From the depressed anus the prominent cutinized rectum is one and one-fourth times as long as the anal body-diameter. The

cells of the intestine contain numerous, very fine, colorless granules. The conoid, subarcuate tail tapers from in front of the anus to the simple, unarmed, convex-conoid, rather blunt spinneret. The ellipsoidal caudal glands are small and inconspicuous, more or less unsymmetrical, and apparently lie in a close tandem opposite the anus. The elongated to fusiform, granular renette cell lies behind the neck a distance equal to one and one-half body-diameters; it is as long as the body is wide and one-fifth as wide as long. Female sexual organs double. The tapering ovaries are of moderate size and extend half way back to the vulva. They contain few ova arranged for the most part single file. The simple, strong, tapering, rather stout spicula are at their widest part about onesixth as wide as long. Their proximal ends appear to lie more or less opposite the body-axis. The simple, rather frail, slender accessory piece is about twothirds as long as the spicula. There are no supplements or special papillae. *Habitat:* "Seagrass," shoal, two miles off Key West, Florida, U. S. A. Fig. 117.

ABBREVIATIONS USED IN ILLUSTRATIONS

Frequently the abbreviations are combined, thus: set trm, seta terminalis, terminal hair; set cph axt subl, seta cephalica dextra sublateralis, right sublateral cephalic seta.

Ac, accessory al, wing amp, ampulla amph, amphid an, anus, anal anak, anakinesis, anaphase ann, annule ant, anterior anus, anus apic, apiculum apnd, appendage apph, apophysis ar, area, field asp, aspect, view ast, aster axil, axil, axillary ax, axis, axis

Bas, base birefr, birefringent blb, bulb, bulbous brs, bursa, bursal

Cal, lime, calcareous cav, cavity cd, cdl, tail, caudal cer, ceratin, ceratinous cerv, cervical chrm, color, chromatic chrmt, chromatin chrsm, chromosome chrt, chromatin cir, cirrus, cirri cl, cell, cellular clc, cloaca, cloacal clv. cleavage, cleft cntr, centrosome col, collum, constriction com, commissure comp, companion constr, constriction cop, copulatory corp, body, thing, corpus cost, costa, rib, costal cph, cephalum, cephalic cpl, hair, capillary crd, cardia, cardiac crib, sieve, mesh crp, corpus, body, thing crv, neck, cervical cryst, crystal, crystalline cst, costa, rib, costal cut, cuticle, cuticular cutn, cutin, cutinous cytp, cytoplasm

Dct, duct dep, deposit, deposited diast, diaster dir, directrix, guide dnt, denticle, little tooth dsc, disc, discoid dsl, dorsal, dorsad dst, distal, far, farther

dxt, right, right-hand

 $\mathbf{E}^{f, \text{efferent}}_{iest, elastic spring, springy}$ eles, elevation elmi, element, component emb, embryo, embryonic eq, equator, equatorial ex, excreta, excretory ex p, excretory pore extn, extension, extended extnl, external extr, external

 $\mathbf{F}_{fasc, fb}^{ab, fb, framework}$ $f_{asc, fascicle}$ $f_{br}, fibre, fibrous$ $f_{x}, flexure$ fr, front, frontal frt, fertile, fertilized furc, furcation, forked

Gam, gamete glot, glottis, glottoid gub, glottis, glottoid gub, gubernaculum, guide, accessory piece gnd, gonad gng, ganglion gnn, granule, granular

Im, immature ing, ingested int, intestine, intestinal intrl, internal, inner intr, interior

 $\mathbf{J}^{nc, \text{ junction, junctional}}$

 $\mathbf{K}^{ar, \text{ karyokinetic figure}}$

L line lac, lacuna, pit, depression lam, lamina, plate, laminate lat, lateral, laterad lb, lip, labial lns, lens (of eye) lob, lobe, lobate longt, longitudinal trv, larva, larval lngt sec, longitudinal section lum, lumen, luminal

Maj, major, the larger mat, mature marg, margin, edge, marginal ma, middle, median mesok, mesokinesis, mesophase metok, metakinesis, metaphase micry, microzoon min, minor, the lesser mit, mitosis, mitosis-figure mnd, mandible, jaw, mandibula monast, monaster msc, muscle, muscular mur, wall, mural

N nerve ncl, nucleus, nuclear nema, nema. nematode nr, nerve-ring nro, nerve nud, naked

Oc, eye, ocular oe, oesophagus, oesophageal on, onchium, tooth, spear onch, onchium, spear, onchial öcyt, öocyte or, mouth, oral org, organ org?, organ in doubt, doubtful os, ostium or, ovum, egg orr, ovary, ovarian

P por, pore par, parasite, parasitic pct, pectoral pctr, peculiar, remarkable pgm, pigment, pigmented ph, pharynx, pharyngeal phs, phase, state, condition pigm, pigment, pigmented plp, palp plr, polar pnct, point, dot, punctate por, pore post, posterior pp, ppl, papilla, papillate prercl, prerectum prok, prokinesis, prophase prok, protophyte prtp, protophyte prz, proxima, proximal pseudon, pseudonchium punct, point, bead, dot pyl, pylorus, pylorie

Rach, rachis, axial strand rcpt, receptacle, sack rct, recum, rectal red, reduction, reduced reg, region rem, lost, discarded ren, renette, ventral gland res, reservoir ret, reticulum, reticular rot, rotifer rtr, retrorse, reversed rtrd, retractor, retracting rud, rudiment, rudimentary

S^{al}, saliva, salivary sb, sub sc, scale, scaly sec, section, cross-section secnd, second, secondary seg, segment, segmented sem, semen, seminal set, seta, setaceous snst, left, left-hand som, soma, body, somatic sp, spiculum, spicula sphnc, sphincter spir, spireme, spiral spm, sperm, spermatozoa spmct, spermatocyte spmtd, spermatid spn, spinneret spnl, spinle sphc, spindle sq, scale, squamule st, stoma, mouth, pore str, stria, striated sub. sub, nearly, almost subd, subdorsal subl, sublateral subm, submedian subst, substance, matter subv, subventral sup, supplement, supplementary sut, suture

 \mathbf{T}^{b} , tube, tubular teg, shell, tegument telek, telekinesis, telephase test, tessellation trans, transverse trm, end, blind end, terminal trd, tetrad, four-fold tum, tumor, swelling, swollen

T]^t, uterus, uterine

V vessel vaq, vagina, vaginal valv, valve, valvular vas, vessel vas def, v def, vas deferens vesic, vesicle, vesicular val, vulva vat, vestige, vestigial vesti, vestibule, vestibular vest, vestibule, vestibular

Zon, zone, zonal