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September 2005

# Online Dictionary of Invertebrate Zoology: T 

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Maggenti, Mary Ann Basinger; Maggenti, Armand R.; and Gardner, Scott, "Online Dictionary of Invertebrate Zoology: T" (2005). Armand R. Maggenti Online Dictionary of Invertebrate Zoology. 5.
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## T

tabula n.; pl. -ae [L. tabula, table] 1. (CNID: Anthozoa) Horizontal partitions across the vertical canals of corals. 2. (ECHINOD: Asteroidea) A flat elevated dorsal plate of sea stars.
tabular a. [L. tabula, table] Arranged in a flat surface.
tachyauxesis n. [Gr. tachys, quick; auxesis, growth] Rapid growth; a part or structure that grows at a quicker rate than the organism as a whole. see bradyauxesis, isauxesis.
tachyblastic a. [Gr. tachys, quick; blastos, bud] Referring to thin shelled eggs that begin cleavage immediately after oviposition and develop quickly; summer egg. see opsiblastic.
tachygen n. [Gr. tachys, quick; gennaein, to produce] An evolutionary structure of abrupt origination.
tachygenesis n. [Gr. tachys, quick; genesis, beginning] The shortening or acceleration of embryonic development by omitting one or more developmental stages. see bradygenesis.
tachytelic a. [Gr. tachys, quick; telos, completion] Evolution at a faster rate than usual. see horotelic.
-tactic a. [Gr. taktikos, comb. form] Used in adjectives formed from nouns ending in -taxis.
tactile a. [L. tactus, touch] Pertaining to the organs of the sense of touch.
tactile combs (CNID: Hydrozoa) Patches of long stiff hairs on the bell margin of hydromedusae.
tactile sensillum see sensillum trichodeum
tactoreceptors n.pl. [L. tactus, touch; receptor, receiver] Hairs, bristles, or other epidermal structures that function in touch where the organism comes in contact with the substratum, vibration of the substratum or high intensity
airborne sounds.
taenia n. [Gr. taenia, band or ribbon] A band, such as of nerve or muscle.
taeniate a. [Gr. taenia, band or ribbon] Having a broad longitudinal marking.
taenidium n.; pl. -nidia [L. dim. taenia, band or ribbon] 1. (ARTHRO: Chelicerata) In Acari, a ribbon-like canal on the surface of the tegument. 2. (ARTHRO: Insecta) A circular or spiral chitinous thickening, strengthening the inner wall of the trachea.
taenioglossate radula (MOLL: Gastropoda) A radula with numerous transverse rows of lingual teeth, usually seven to a row; median tooth frequently has cusps, the largest in the middle, broad cuspidate admedians and narrow, hooklike marginals.
tagma n.; pl. tagmata [Gr. tagma, an arrangement] 1. A major division of body regions of a metamerically segmented animal, particularly arthropods. see pseudotagma. 2. (ARTHRO: Chelicerata) The prosoma and opisthosoma. 3. (ARTHRO: Insecta) The head, thorax, pedicel and gaster of Formicidae.
tagmosis n . [Gr. tagma, an arrangement] The division of a body into groups of segments, forming distinct trunk sections or tagmata.
tail n. [A.S. taegel, tail] 1. (ARTHRO: Insecta) The cauda; in some Lepidoptera and Neuroptera, the elongated processes on the hind wings. 2. (NEMATA) That portion of the body in vermiform adults posterior to the anus.

## tailfan see caudal fan

tail valve (MOLL: Polyplacophora) The posterior valve.
Takakura's duct (NEMER:Enopla) In Carcinonemertidae, a common efferent canal in the male reproductive system that links the testes and discharges into the intestine near the anus.
talon n. [L. talus, heel] Shaped like a claw; unguiculate.
talus n. [L. talus, heel] (ARTHRO: Insecta) The juncture of the tibia and tarsus.
tandem a. [L. tandem, at length] One behind the other; two connected or attached together.
tangent a. [L. tangere, to touch] Touching; coming together at a single point.
tangoreceptor n . [L. tangere, to touch; receptor, receiver] A simple tactile sense organ, consisting of one sense cell.
tanylobous a. [Gr. tanaos, stretched; lobos, lobe] (ANN: Oligochaeta) Pertaining to the tongue of the prostomium extending through segment i to the groove between segments i and ii , dividing the peristomium dorsally. see epilobous, prolobous, zygolobous.
tapetum n. [L. tapete, carpet] 1. A reflecting surface within an eye. 2. (ARTHRO: Insecta) A light reflecting surface within clear-zone eyes, formed by tracheae that run through the eye parallel with the ommatidia forming a layer around each one, and reflecting the light back into the ommatidia. tapetal a.
tapinoma-odor (ARTHRO: Insecta) In Hymenoptera, a rancid butter smell secreted from the anal glands of some ants of the Dolichoderinae.
Tardigrada, tardigrades n.; n.pl. [L. tardus, slow; gradus, step] A phylum of small, multicellular coelomates, commonly called water bears, or bear animaecules due to a lumbering, bearlike gait.
tarsal a. [Gr. tarsos, sole of foot] Pertaining to the foot or tarsus.
tarsal claw (ARTHRO) A claw at the apex of the tarsus; unguis.
tarsal comb see pedal stridulating organ
tarsal formula (ARTHRO: Insecta) Referring to the number of tarsal segments on the front, middle, and hind tarsi.

## tarsal pulvillus see euplantula

tarsation n. [Gr. tarsos, sole of foot] (ARTHRO: Insecta) Communication by touching with the tarsi.
tarsomere, tarsite [Gr. tarsos, sole of foot] (ARTHRO) A subdivision or segment of the tarsus.
tarsungulus n. [Gr. tarsos, sole of foot; L. dim. unguis, claw]
(ARTHRO: Insecta) The fused tarsal segment and claw of many coleopteran larvae.
tarsus n. [Gr. tarsos, sole of foot] 1. The foot. 2. (ARTHRO) The most distal part of the leg, immediately beyond the tibia, usually subdivided into two to five segments, bearing the claws and pulvilli.
taste bud (ARTHRO: Insecta) In Lepidoptera, specialized taste cells located on the tarsi.
tautonym n. [Gr. tautos, the same; onyma, name] In the binomial system, the same name given to a genus and one of its species or subspecies.
taxis n.; pl. taxes [Gr. taxis, arrangement] Movement of a motile animal in response to a source of stimulation. a. Positive taxis : toward the stimulus. b. Negative taxis : Away from the stimulus.
taxodont a. [Gr. taxis, arrangement; odon, tooth] (MOLL: Bivalvia) With many short interlocking teeth, some or all transverse to the hinge margin; similar to prionodont.
taxometrics see numerical taxonomy
taxon n.; pl. taxa [Gr. taxis, arrangement] Any taxonomic group sufficiently distinct to merit being distinguished by name, i.e., phylum, class, order, etc.
taxon cycle A cycle of expansion and contraction of the geographic range and population density of a species or higher taxonomic category.
taxonomic a. [Gr. taxis, arrangement; nomos, law] Pertaining to the classification of organisms.
taxonomist n. [Gr. taxis, arrangement; nomos, law] One who studies the theory and practice of classifying organisms.
taxonomy n. [Gr. taxis, arrangement; nomos, law] The study of the theory, procedure, and rules of classification of organisms, based on similarities and differences. see classical taxonomy, cytotaxonomy, numerical taxonomy, experimental taxonomy, classification, systematics.
tectiform a. [L. tectum, roof; forma, shape] Roof-like; sloping.
tectostracum see cerotegument
tectum n. [L. tectum, roof] 1. (ARTHRO: Chelicerata) In Acari, the blade-shaped prolongation of the exoskeleton to protect an organ or joint; epistome; cervix. 2. (ARTHRO: Crustacea) The central portion of the carina of barnacles.
teeth n. [A.S. toth, tooth] 1. Hardened growths on mandibles, maxillae or stomatal walls. 2. (CNID: Hydrozoa) Deep or very shallow indentations on the hydrothecal margins; peglike chitinous growths just inside the margins. 3. (MOLL: Polyplacophora) Portions of the articulamentum between the slits; may be pectinated or propped (outside edges thickened), sharp and smooth.

## teges see seta

tegillum n.; pl. -a [L. teges, mat] (ARTHRO: Insecta) In Scarabaeoidea larvae, a paired patch of hooked or straight setae on each side of the venter of the tenth abdominal segment beside paired palidia; part of the raster.
tegmen n.; pl. -mina [L. tegmen, cover] 1. A tegument or covering. 2. (ARTHRO: Insecta) a. In Coleoptera, a single or divided sclerite proximad of the penis (phallobase); may be divided into basal piece and parameres. see tegumen. $b$. In some Orthoptera, Dictyoptera and Homoptera, the hardened leathery fore wing. 3. (ECHINOD: Crinoidea) An oral wall covering the calyx cup.
tegmentum n. [L. tegere, to cover] (MOLL: Polyplacophora) The outer, sometimes softer and porous calcareous layer of the valve below the periostracum.
tegula n.; pl. -lae [L. tegula, roofing tile] (ARTHRO: Insecta) 1. A small convex, scalelike lobe overlying the base of the fore wing; paraptera. 2. In Diptera, small anterior sclerites located in an incision of the lateral region of the notum. 3. In Lepidoptera, well developed, and carried on a special tegular plate of the notum, supported by a tegular arm arising from the base of the pleural wing process.
tegular arms (ARTHRO: Insecta) Internal structures supporting the tegular plate.
tegular plate (ARTHRO: Insecta) In Lepidoptera, a notal structure bearing the tegulae of the fore wings.
tegulum n. [L. tegulum, roof] (ARTHRO: Chelicerata) In Acari,
the dorsal region of the cheliceral frame extending from the cheliceral base to the rostrum.
tegumen n . [L. tegumen, cover] (ARTHRO: Insecta) 1. Tegmen. 2. (ARTHRO: Insecta) In male Lepidoptera, a dorsal roof or hoodlike structure of the genitalia.
tegument n . [L. tegumentum, covering] 1. Any natural outer covering. 2. (ACANTHO) The non-cellular body wall or cuticle. tegumentary a.
tegumentary glands (ARTHRO: Chelicerata) In Acari, specialized secretory glands, located in or immediately beneath the hypodermis.
tela n.; pl. -ae [L. tela, web] (BRACHIO) One of a pair of points at the end of the beak ridges that project into and beyond the pedicle opening.
telaform larva (ARTHRO: Insecta) In certain heteromorphic Hymenoptera first instar larva, a sharp, tail-like caudal horn curved anteriorly, body constricted between a large anterior part (cephalothorax) and an elongated posterior part.
telamon n. [Gr. telamon, strap] 1. A supporting band. 2. (NEMATA: Secernentea) A thickening of the anterior cloacal wall in the order Strongylida, that acts as an accessory guiding structure for the spicules; sometimes erroneously applied in plant parasites to the gubernacular capitulum.

## telegonic see panoistic ovariole

teleiochrysalis n. [Gr. teleios, perfect; chrysallis, golden thing] (ARTHRO: Chelicerata) In Acari, the third stage nymph enclosed in the integument of the preceeding nymphal stage.
telenchium n. [Gr. telos, end; enchos, spear] (NEMATA: Secernentea) Sometimes used to denote the shaft of the stylet in plant parasites in the order Tylenchida. see metenchium.
teleoconch n. [Gr. teleios, complete, konche, shell] (MOLL: Gastropoda) The entire shell, excluding the protoconch.
teleodont a. [Gr. teleios, complete; odon, tooth] 1. (ARTHRO: Insecta) In Coleoptera Lucanidae, referring to males bear-
ing large mandibles. see amphiodont; priodont. 2. (MOLL: Bivalvia) Hinge with cardinal and lateral teeth, but with additional elements, as Venus.
teleology n. [Gr. teleios, complete; logos, discourse] A theory in biology that evolution or nature is guided by a purpose.
teleotrocha see trochophore
telepod see telopod
telescope v.i. [Gr. tele, far; skopos, watcher] To have the ability to evert and invert a body part. telescopic a.
telioderma n. [Gr. teleios, complete; derma, skin] (ARTHRO: Chelicerata) In Acari, the cuticle of the previous stage nymph (apoderma) covering the tritonymph.
teliophan see tritonymph
telmophage n. [Gr. telma, pool; phagein, to eat] (ARTHRO) A blood feeding arthropod that severs skin and blood vessels, causing a small blood hemorrhage so as to feed.
telocentric a. [Gr. telos, end; kentron, center of circle] Chromosomes in which the centromere is terminal. see acrocentric.
telodendria n. [Gr. telos, end; dendros, tree] The branching terminals of an axon.
telofemur n. [Gr. telos, end; L. femur, thigh] (ARTHRO: Chelicerata) In Acari, a distal segment of the femur separated from the basifemur by the basifemoral ring.

## telogonic see panoistic ovariole

telolecithal egg An egg cell with abundant yolk concentrated toward the lower side of the cell. see centrolecithal egg.
telomitic see telocentric
telophase n. [Gr. telos, end; phasis, aspect] The final stages of mitosis during which the chromatids (daughter chromosomes) are formed and the cytoplasm divides.
telophragma see Z-band or disc
telopod n. [Gr. telos, end; pous, foot] 1. (ARTHRO: Crustacea) Part of an appendage distal to the coxa. 2. (ARTHRO: Diplopoda) In males, a modified leg, serving a copulatory function, on one of the posterior segments.
telopodite n. [Gr. telos, end; pous, foot] (ARTHRO: Insecta) The primary shaft of a limb distal to the coxopodite; the basipodite.
telorhabdions n.pl. [Gr. telos, end; rhabdos, rod] (NEMATA) The posterior wall plates of the telostome. see rhabdion.
telostome, telostom n. [Gr. telos, end; stoma, mouth] (NEMATA: Secernentea) The posterior part of a stoma. see protostome.
telosynapsis, telosyndesis see acrosyndesis
telotarsus n. [Gr. telos, end; tarsos, sole of foot] (ARTHRO) In Chelicerata and Chilopoda, the distal of the two principal tarsomeres of the tarsus.
telotaxis n. [Gr. telos, end; taxis, arrangement] Movement directed towards a goal, with a minimum of deviation in the path taken. see kinotaxis, tropotaxis.
telotroch n. [Gr. telos, end; trochos, wheel] 1. (ANN: Polychaeta) The preanal girdle of cilia near the posterior end. 2. (PHORON) A ciliary ring on the posterior of the trunk, probably a locomotor organ.
teletrocha see trochophore
teletrophic ovariole (ARTHRO: Insecta) An ovariole in which all the trophocytes are terminal in the germarium, and connect to the egg by a slender trophic chord; acroptrophic ovariole; telotrophic egg tube. see polytrophic ovariole.
telson n. [Gr. telson, end] 1. (ARTHRO) The terminal portion of an arthropod body (not considered a true somite), usually containing the anus; the periproct. 2. (ARTHRO: Chelicerata) In scorpions, the distal stinging caudal spine. 3. (ARTHRO: Crustacea) The posterior projection, sometimes with caudal furca; the last body unit/segment in which the anus is not terminal; postsegmental region; style. 4. (ARTHRO: Diplopoda) The preanal ring. 5. (ARTHRO: Insecta) a. The 12th abdominal segment of primitive insects and some insect embryos. b. In scale insects, the lateral cuticular extension of the 8 th segment. telosonic a.
template n . [F. dim. temple, used in weaving] 1. A pattern from which objects are copied. 2. In genetics, a strand of DNA acting as template for a strand of RNA, which in turn
serves as a template for nucleic acids or proteins.
temporal isolation Non-interbreeding between species as a result of time differences, i.e., diurnal versus nocturnal.

## temporal organs see organs of Tomosvary

temporary haplometrosis (ARTHRO: Insecta) In early colony development of social insects, a single female (queen) initiates development and is either joined by its offspring or females from other colonies, producing a pleometrotic society. see functional haplometrosis, permanent haplometrosis.
temporary parasite A parasite that comes in contact with its host to feed and then departs; intermittent parasite; micropredator.
temporary pleometrosis (ARTHRO: Insecta) In social insects, a colony in which two or more females share a nest that was founded by a single female; non-founding females do not cooperate in nest development, and later disperse and found individual colonies. see permanent pleometrosis.
temporary social parasitism (ARTHRO: Insecta) In Hymenoptera, a parasitic queen entering an alien nest replacing the alien queen by killing or sterilizing it and eventually dominating the nest.
tenacipeds n.pl. [L. tenere, to hold; pes, foot] (ARTHRO: Chilopoda) In Lithobiida, ambulatory legs of segments 14 and 15, elongated and apparently used for mating and capture of prey.
tenaculum see retinaculum
tenent a. [L. tenere, to hold] Adapted for clinging, i.e., hairs.
teneral a. [L. tener, soft] (ARTHRO) A term applied to any newly emerged soft-bodied individual; callow worker.
tensor a. [L. tendere, to stretch] A muscle that stretches a part of a body or renders it of use.
tentacle n. [L. tentaculum, feeler] Any elongate flexible appendage usually near the mouth. tentacular a.
tentacle crown (BRYO) Tentacles expanded into an external position as for feeding.
tentacle sheath (BRYO) That part of the body wall that supports and encloses the tentacles when everted and retracted.
tentacular atrium (BRYO) A cavity inside the tentacle sheath, with tentacles retracted.
tentacular bulb (CNID) Swelling at the base of a medusoid tentacle that serves primarily in digestion and manufacture of nematocysts and sometimes bears an ocellus or other sensory structure; ocellar bulb.
tentacular cirrus (ANN: Polychaeta) Sensory projection(s) of the peristomium or cephalized segment.
tentacular club (MOLL: Cephalopoda) A terminal suckered pad, comprised of carpus, manus and dactylus.
tentacular crown see branchial crown
tentacular fold (MOLL: Bivalvia) The central fold of the oyster mantle edge that bears the tentacles in two rows.
tentacular palp (ANN: Polychaeta) A grooved, food-gathering appendage in many sedentary species.
tentaculocyst see rhopalium
tentaculozooid n. [L. tentaculum, feeler; Gr. zoon, animal; eidos, form] (CNID: Hydrozoa) A modified polyp in the form of a single tentacle, usually found at the outermost part of the colony; a protective zooid. see tentaculozooid, gastrozooid.
tentilla n. [L. tentaculum, feeler] (CNID: Hydrozoa) In Siphonophora, lateral contractile tentacular branches.
tentorial bar (ARTHRO: Insecta) The right or left half of the tentorium, consisting mainly of the united anterior and posterior arms.
tentorial bridge (ARTHRO: Insecta) The apices of the two posterior arms fused medially; incomplete or absent in most Diptera.

## tentorial fovea see tentorial pits

tentorial macula (ARTHRO: Insecta) The depressions or dark spots marking the points of union of the dorsal tentorial arms and the epicranal wall near the antennae.
tentorial pits (ARTHRO: Insecta) External depressions on the surface of the head marking points of union of the arms with the outer wall of the head; usually two in the epistomal suture and one at the lower end of each postoccipital suture.
tentorium n.; pl. -oria [L. tentorium, tent] (ARTHRO: Insecta) Two anterior and two posterior apodemes (arms) that form the internal skeleton of the head, serving as a brace for the head and for the attachment of muscles; in Culicidae, the right and left halves are not connected.
tenuous a. [L. tenuis, thin] Thin, slender, delicate.
teratocyte n . [Gr. teras, monster; kytos, container] (ARTHRO: Insecta) In Lepidoptera Pieridae, unicellular forms resulting from the embryonic membranes of parasitic Braconidae.
teratogen $n$. [Gr. teras, monster; genes, producing] Any substance that causes or increases the incidence of congenital abnormalities in a population.
teratogenesis n. [Gr. teras, monster; genesis, beginning] The production of monstrous fetuses or growths.
teratogyne n. [Gr. teras, monster; gyne, woman] (ARTHRO: Insecta) In Hymenoptera, the aberrant form of female in a Formicidae colony, characterized by overdeveloped legs and antennae, and excess pilosity of the body or defective wings; formerly referred to as beta-females. see alphafemale.
teratology n. [Gr. teras, monster; logos, discourse] The biological study of structural malformations and monstrosities.

## terebella see terebra

terebra n.; pl. -bras, -brae [L. terebra, borer] 1. A borer or piercer. 2. (ARTHRO: Insecta) a. In Hymenoptera, the stylets and stylet-sheath. b. In Odonata and Hymenoptera, the gonapophyses of segments 8 and 9. 3. (MOLL) a. In Bivalvia, the anterior margin of the valve. b. In carnivorous Gastropoda, the radula. terebrant, terebrate a.
teres n . [L. teres, rounded] Nearly cylindrical. terete a.
terga pl. tergum
tergal a. [L. tergum, back] Situated on the back.
tergal fissure (ARTHRO: Insecta) In Symphyta and primitive forms of many orders, a membranous line from one lateral margin to the other, behind the anterior notal wing processes.
tergal fold see epimere
tergal margin (ARTHRO: Crustacea) In Thoracica Cirripedia, the edge of the scutum adjacent to the tergum, or edge of any plate abutting the tergum.
tergal suture (ARTHRO: Insecta) In many larvae, a Y-shaped dorsal suture of the head.
tergal valves see cercus
tergite n . [L. tergum, back] (ARTHRO) A dorsal sclerite of a segment.
tergolateral margin (ARTHRO: Insecta) In Cirripedia, in those possessing upper laterals, the angular edge of the scutum.
tergopleural a. [L. tergum, back; pleuron, side] Referring to the upper and lateral portion of a segment.
tergopore n. [L. tergum, back; porus, pore] (BRYO: Stenolaemata) In Tubuliporina, a type of kenozooecium on the back side of a colony, having a polygonal aperture.
tergum n.; pl. terga [L. tergum, back] (ARTHRO) The dorsal surface of any body segment.
termen n . [L. terminus, boundary] (ARTHRO: Insecta) The outer, or distal margin of the wing.
terminal a. [L. terminus, boundary, end] At the end; forming the end of a series or part; at the extreme end.
terminal anecdysis When maximum size is reached, no more ecdyses occur. see anecdysis.
terminal arborizations Branching fibrils ending the axon and collateral ends. see telodendria.
terminal cirri (ARTHRO: Crustacea) In Ascothoracica, cirri located at the posterior end of the thorax, except for first pair.
terminal claw spines (ARTHRO: Crustacea) In Cladocera, toothlike projection, varying in size, at the concave end of the postabdomen.
terminal filament (ARTHRO: Insecta) A cellular end thread of the female ovariole that forms a common thread uniting with that from the ovary of the opposite side.
terminal diaphragm (BRYO: Stenolaemata) A membranous or calcified diaphragm that separates the body cavity from the environment.
terminalia n.pl. [L. terminus, boundary, end] Collectively, any terminal part or structure.
termitarium n.; pl. -ia [L. termes, woodworm] (ARTHRO: Insecta) An elaborate nest wherein a colony of termites live.
termitophile n. [L. termes, woodworm; philos, loving] A symbiont of termites.
terranes n.pl. [L. terra, earth] Fragments of former continents that make up the present day continents.
terrestrial a. [L. terrestris, of the earth] Belong to or living on the ground or earth; opposed to aquatic and arboreal.
terricolous a. [L. terra, earth; colare, to inhabit] Soil inhabiting.
territory n . [L. territorium, domain] An area defended by an animal against other members of its own or other species.
tertiary a. [L. tertius, third] Third in degree of standing in classification.
tertiary parasite A parasite of a hyperparasite.
tertiary reproductive (ARTHRO: Insecta) In Isoptera, an ergatoid reproductive; a third-form reproductive.
tertibrach n. [L. tertius, third; brachium, upper arm] (ECHINOD: Crinoidea) Any ray plate of the third branchitaxis; palmars. tertibrachial a. see postpalmars.
tessellate a. [L. tessellatus, mosaic] Marked or colored in the pattern of squares, or oblong areas; checkerboard-like.
test n . [L. testa, a shell] A rigid external covering or supporting structure.
testaceology n . [L. testa, shell; logos, discourse] The study of shells; conchology.
testaceous a. [L. testaceus, covered with a shell] Bearing a test or hard covering; of the nature of a shell. see con-

## chiferous.

## test-cross see back-cross

testis n.; pl. testes [L. testis, testicle] That portion of the male reproductive system producing spermatozoa; a spermary.
testisac n. [L. testis; testicle; saccus, sac] (ANN: Hirudinoidea) The testis sac.
testis sac (ANN: Oligochaeta) A membranous sac around the testis, seminal vesicle and the funnel to the vas deferens.
testudinate a. [L. testudo, tortoise] In the form of the shell of a tortoise; arched; vaulted.
tetanus, tetany n. [Gr. tetanos, stiffness] State of contraction of a muscle caused by continuous stimulation either natural or electrical.
tetracerous, tetracerate a. [Gr. tetra, four; keras, horn] Having four horns.
tetraclad n. [Gr. tetra, four; klados, branch] (PORIF) A megasclere desma with rays bearing terminal couplings, or based on a calthrops, or both; tetraclone .
tetracladine, tetracrepid (PORIF) A tetraxonid desma.
tetracotyle n. [Gr. tetra, four; kotyle, cup-shaped] (PLATY: Trematoda) A metacercaria in the family Strigeidae.

## tetractine see tetraxon

tetrad n. [Gr. tetra, four; -ad, collective noun] Any set of four.
tetradelphic a. [Gr. tetra, four; delphys, womb] (NEMATA) Having four uteri.
tetramerous a. [Gr. tetra, four; meros, part] 1. Having a four jointed tarsus. 2. Having body parts arranged in fours.
tetramorphic a. [Gr. tetra, four; morphe, form] (CNID: Hydrozoa) Having four distinct forms in one individual.
tetraploid n. [Gr. tetraple, fourfold; eidos, like] A polyploid with four haploid chromosome sets.
tetrapod n. [Gr. tetra, four; pous, foot] Having 2 pair of legs. see bipod.
tetrapterous a. [Gr. tetra, four; pteron, wing] Having 4 wings.
tetrasomic a. [Gr. tetra, four; soma, body] Polysomic cells with one chromosome represented 4 times in a normal diploid; $2 n+2$.
tetrathyridium n . [Gr. tetra, four; thyridion, window] (PLATY: Cestoda) A cysticercoid of Mesocestoides which has a solid body and a scolex not surrounded by special membranes. tetrathyridial a.
tetraxon n. [Gr. tetra, four; axon, axis] (PORIF) A spicule of 4 equal and similar rays meeting at equal angles; tetractine; quadriradiate. tetraxonid a.
thalassophilous a. [Gr. thalassa, sea; philos, loving] Inhabiting or dwelling in the sea; pelagic; thalassic.
thallus n . [Gr. thallos, young shoot] The body or colony of a compound animal.
thamnophilous a. [Gr. thamnos, shrub; philos, loving] Inhabiting thickets or dense shrubbery.
thanatocoenosis n. [Gr. thanatos, death; koinos, common] An assemblage of fossils comprised of the remains of organisms brought together after death. see biocenosis.
thanatosis n. [Gr. thanatos, death] Feigning death; letisimulation.
theca n .; pl. thecae [Gr. theke, case] 1. A sheath or sac-like covering or structure for an organ or organisms, as proboscis, tubes, shells, pupa or larvae. 2. (ANN: Oligochaeta) Spermatheca. 3. (ARTHRO: Insecta) A fold or sheath from phallobase enclosing the aedeagus. 4. (ECHINOD: Crinoidea) The skeleton. thecal, thecate a.
thelycum n. [Gr. thelykos, feminine] (ARTHRO: Crustacea) In some female Decapoda, an external pocket on the ventral side of the thorax, functioning as a seminal receptacle.
thelygenous a. [Gr. thelys, female; genes, producing] Producing mostly or only female offspring; arrhenogenous. thelygenesis n .
thelyotoky n. [Gr. thelys, female; tokos, offspring] A type of parthenogenesis in which unfertilized eggs develop into females; thelytoica. thelyotokous a. see arrenotoky, deuterotoky, amphitoky.
theory of probabilities A mathematical theory used by taxonomists, whereby they assume that no two individuals will simultaneously have the same combination of characters as those of a given species; in mathematics, the theory of chance.
thermocline n. [Gr. therme, heat; klinein, to slope] In the strata of rapidly changing temperatures in lakes, the narrow dividing stratum between the epilimnion and hypolimnion.
thermophile n . [Gr. therme, heat; philos, loving] Living at high temperatures; hot springs fauna.
thermophobe n. [Gr. therme, heat; phobos, hate] An organism that lives at low tempertures.
thermoreceptor n . [Gr. therme, heat; L. recipere, to receive] A sensory receptor that reacts to temperature stimuli.
thermotaxis n . [Gr. therme, heat; taxis, arrangement] A taxis in which heat is the response initiating stimulus; regulation of body temperature.
thesocytes n.pl. [Gr. thesis, deposit; kytos container] (PORIF) In hibernating fresh water sponge gemmules, binucleate, highly vitelline archaeocytes.
thickener cells (PORIF) Cells influencing ray thickness during secretion of calcareous spicules.
thickness n . [A.S. thicce, thick] (MOLL: Bivalvia) 1. See inflation. 2. Measurement from the inner to outer shell surface.
thigmotaxis n .; pl. taxes [Gr. thigma, touch; taxis, arrangement] The taxis of contact; stereotaxis. a. Positive thigmotaxis: toward the contact. b. Negative thigmotaxis: away from the contact. thigmotactic a.
thigmotropism n. [Gr. thigma, touch; tropos, turn] Tropism in which direction is determined by contact with a solid body; stereotropism.
third axillary (ARTHRO: Insecta) A Y-shaped sclerite of the wing, with a flexor muscle inserted into the crotch of the $Y$ and usually articulating with the posterior notal process and a group of anal veins.
third-form reproductive (ARTHRO: Insecta) In Isoptera, an
ergatoid reproductive; a tertiary reproductive.
thoracic a. [Gr. thorax, chest] Associated with the thorax.
thoracic ganglia (ARTHRO: Insecta) The first three ganglia of the ventral nerve cord, one in each thoracic segment, controlling the locomotory organs.

## thoracic glands see prothoracic glands

thoracic region (ARTHRO: Insecta) The second of three regions of the embryonic trunk; the future locomotor center.
thoracic squama (ARTHRO: Insecta) In some Diptera, one of three membraneous lobes in the region of the wing base appearing to be derived from the posterior margin of the scutellum. see alula, alar squama.
thoracomere n. [Gr. thorax, chest; meros, part] (ARTHRO: Crustacea) A thoracic segment.
thoracopod(ite) n. [Gr. thorax, chest; pous foot] (ARTHRO: Crustacea) Any appendage of the thoracic somite; a cormopod. see phyllopod, maxilliped, pereopod.
thorax n.; pl. thoraxes, thoraces [Gr. thorax, chest] 1. (ARTHRO: Chelicerata) In Arachnida, fused with the head to form the cephalothorax of spiders. 2. (ARTHRO: Crustacea) The tagma between the cephalon and abdomen comprising the anterior part of the trunk; cormus; pereon. 3. (ARTHRO: Insecta) a. The body region behind the head, bearing the legs and wings and encompassing the pro-, meso- and metathorax. b. In Hymenoptera, the second tagma of the body consisting of pro-, meso-, metathorax and the epinotum of Formicidae.
thread n. [A.S. thraed, twist] 1. A fine linear surface elevation. 2. (MOLL: Bivalvia) A narrow elevation on the shell surface. 3. (MOLL: Gastropoda) The silky fibers of the byssus.

## thread capsule see nematocyst

thread cell (CNID) The cnidoblasts.
thread press see silk press
thylacium n. [Gr. thylax, sack] (ARTHRO: Insecta) An external gall-like cyst in the abdomen of the host containing the Dryinidae parasitic larva.
thylacogen n. [Gr. thylax, sack; genes, producing] A chemical produced by parasites that cause hypertrophy of host tissue.
thyridium n; pl. -ia [Gr. dim. thyris, window] (ARTHRO: Insecta) 1. A small whitish spot in the wings of Neuroptera, Hymenoptera and Trichoptera. 2. In ichneumonid Hymenoptera, a scar-like area on each side of the second abdominal tergite, between the middle and base; the third tergite rarely may have tyridia. thyridial a
thyroid $n$. [Gr. thyra, oblong shield] (ARTHRO: Insecta) In Diptera, a shield-shaped plate on the posterior wall of the beak.

## thysanuriform larva see campodeiform larva

tibia n.; pl. -iae [L. tibia, shin] 1. (ARTHRO: Chelicerata) The fifth segment of a spider leg, between the patella and metatarsus. 2. (ARTHRO: Insecta) The fourth segment of the leg, between the femur and tarsus.
tibial comb (ARTHRO: Insecta) A strigil or scraper.
tibial epiphysis see epiphysis
tibial process/thumb (ARTHRO: Insecta) In Anoplura Pediculus , a delicate modification of the tibia as a holdfast against the powerful claw of the tarsus.
tibial spur (ARTHRO: Insecta) A large spine usually located on the distal end of the tibia.
tibiotarsal organ (ARTHRO: Insecta) In Collembola Sminthurides, a sac-like swelling and an enlarged hair occurring near the distal ends of the tibiotarsus of the third pair of legs.
tibiotarsus n. [L. tibia, shin; Gr. tarsos, sole of foot] (ARTHRO: Insecta) Fused tibia and tarsus; the tibiotarsal segment.
Tiedemann's bodies (ECHINOD: Asteroidea) Tiny, 9 spherical swellings on the inner wall of the ring canal that have been reported to produce amebocytes.
tiled a. [ME. tile] Appearing as a tiled roof; transverse and longitudinal striae on the cuticle.
timbal see tymbal
tinctorial a. [L. tenctorius, of dyeing] Of or pertaining to color, i.e., staining.
tine n. [A.S. tind, spike] Any slender, pointed, projecting part.
tissue n. [F. tissu, tissue] A layer or group of cells of a particular type, or at most a few types, with intercellular material of essentially a particular type.
tissue culture Tissues appropriated from animals and maintained or grown in vitro for more than 24 hours.
titillae n.pl.; sing. titilla [L. titillo, tickle] (NEMATA) Small projections on the distal part of the protrusile gubernaculum.
titillator n. [L. titillo, tickle] (ARTHRO: Insecta) A terminal, small process (spines or small plates) at the distal extremity of the aedeagus.
tocopherol n. [Gr. tokos, birth; pherein, to carry] Vitamin E.
tocospermal a. [Gr. tokos, birth; sperma, seed] Direct transfer of sperm between male and female.
tocospermia n. [Gr. tokos, birth; sperma, seed] 1. (ARTHRO: Chelicerata) A type of sperm transfer by the male chelicera (gonopod), to the female vagina. see podospermia. 2. (MOLL: Cephalopoda) The direct transfer of spermatophores to the female vagina by the male gonopod.
tocostome, tokostome n. [Gr. tokos, birth; stoma, mouth] (ARTHRO: Chelicerata) In Acari, the female genital aperture.
tomentum n. [L. tomentum, stuffing of wool] Covered with closely matted scale-like hair or spines on the body or appendages that cannot be separated; downy. tomentose $a$.

## tone see tonus

tonic muscle (MOLL: Bivalvia) White, opalescent part of the adductor muscle that reacts slowly, but can hold for long periods of time; catch muscle.
tonofibrillae n.pl [Gr. tonos, stretching; L. dim. fibra, fiber] Fine connective fibrils extending from the ends of the skeletal muscles into the cuticle.
tonus, tone n. [Gr. tonos, stretching] 1. The normal, maintained nerve impulse traffic. 2. The normal prolonged steady contracture of muscle fibers. tonic a.
topochemical sense The sense of smell.
topogamodeme n. [Gr. topos, place; gamos, marriage; demos, the people] Individuals inhabiting a particular geographic locality that form a deme.
topomorph n. [Gr. topos, place; morphe, form] An environmental morphologic variant. topomorphic a.
toponym n. [Gr. topos, place; onoma, name] The name of a location thought to be the place of origin of a plant or animal.
topotype n. [Gr. topos, place; typos, type] A specimen collected at the original type-locality.
tori pl. of torus
torma n.; pl. -mae [Gr. tormos, socket] (ARTHRO: Insecta) 1. In Diptera, sclerotic processes between the labrum and clypeus. 2. In Scarabaeoidae larvae, heavily chitinized structures on the ends of the clypeo-lateral suture that extend toward the mesal line, sometimes meeting and fusing on the mesal line.
tormogen n. [Gr. tormos, socket; genes, producing] (ARTHRO: Insecta) An epidermal cell associated with a seta that secretes the cuticle of the socket and bounds the receptor lymph cavity.
tornote n. [L. tornatus, rounded with a lathe] (PORIF) A diactinal monaxon, lance-headed at each end.

## tornus see anal angle

torose a. [L. torus, elevation] A swelling into knobs; cylindrical and swollen at intervals; torous.
torpid a. [L. torpidus, to be numb] Dormant; inactive. see aestivation, hibernation.
torqueate a. [L. torquatus, with a necklace] Having a ring or collar.
torsion n. [L. torquere, to twist] 1. Spiral bending; twisting. 2. (MOLL: Gastropoda) The theory in ancestral gastropods that a 180-degree counterclockwise twisting occurred that caused the crossing of the pleural-visceral connectives in the nervous system to form a figure eight. see chiastoneury, detorsion.
tortuose a. [Gr. torquere, to twist] Twisting; winding; irregularly curved.
torulose a. [L. torulus, little bulge] Having knob-like swellings; moniliform.
torus n.; pl. tori [L. torus, swelling] 1. A blunt, rounded, ridge or protuberance. 2. (ANN: Polychaeta) Low ridges provided with rows of acicular hooks or minute setae or uncini. 3. (ARTHRO: Insecta) In Diptera, the pedicel of the antenna. 4. (PORIF) A more or less doughnut-shaped space around the organism, concerned with water circulation.
totipotent a. [L. totus, all; potens, capable] Said of isolated blastomeres capable of becoming complete embryos.
totomount $n$. [L. totus, all; mons, mountain] The mount of a whole organism for microscopic study.
toxa n. [Gr. toxon, bow] (PORIF) A bow-shaped diactinal microsclere.
toxicognath n. [Gr. toxikon, poison; gnathos, jaw] (ARTHRO: Chilopoda) The forcipulate poison fangs.
toxicology n. [Gr. toxikon, poison; logos, discourse] The science of poisons.
toxin n. [Gr. toxikon, poison] A poisonous substance in the secretions or excretions of a parasite.
toxinosis n . [Gr. toxikon, poison] A disease caused by the action of a toxin.
toxoglossate n. [Gr. toxon, bow; glossa, tongue] (MOLL: Gastropoda) Having a radula always enclosed in the radular sac; marginal teeth harpoon-shaped, filled with venom and loosely arranged in two rows.
toxoid n. [Gr. toxikon, poison; eidos, form] A toxin released from its toxic properties, but not from its antigenic properties.
trabecula n.; pl. -lae [L. trabecula, little beam] 1. A small bar, rod, bundle of fibers, or septum together with other trabeculae which form part of the framework of various organs. see internuncial process. 2. (MOLL: Cephalopoda) In squid and cuttlefish, a support from the edge of the arm inward for the protection of membranes of the arm.
trabeculate a. [L. trabecula, small beam] (ANN: Oligochaeta) Used to describe seminal vesicles that develop as connective tissue proliferations from a septum that have numerous irregular spaces that remain minute until spermatogonia begin to enter. trabeculated $a$.
trachea n.; pl. tracheae [L. trachia, windpipe] 1. The windpipe. 2. (ARTHRO: Chelicerata) For Arachnida, see tube trachae, sieve trachea. 3. (ARTHRO: Insecta) The larger tubes of the respiratory system, lined with taenidia, opening to the outside through the spiracles and terminating internally in the tracheoles. 4. (MOLL: Gastropoda) see ctenidia. 5. (ONYCHO) In Peripatus, short tubes without spiral thickenings, neither branching nor anastomosing, opening externally through numerous minute spiracles. tracheate $a$.
tracheal gills (ARTHRO: Insecta) In aquatic larvae and some aquatic pupae, filiform, lamellate structures supplied with trachae and tracheoles, usually borne on the abdomen. see spiracular gills, blood gills.
tracheal system (ARTHRO) A system of cuticle-line tube opening to the outside through spiracles, functioning in respiration.
tracheoblast n. [L. trachia, windpipe; Gr. blastos, bud] (ARTHRO: Insecta) Cells derived from the epidermal cells lining the trachea, that give rise to the tracheoles.
tracheoles n . [L. dim. trachia, windpipe] (ARTHRO: Insecta) The fine intracelluar terminal branches of the respiratory tubes. tracheolar a.
trachychromatic a. [Gr. trachys, rough; chroma, color] Strongly staining.
tract $n$. [L. tractus, region] 1. An area, region or parts of a system, as a bundle of nerve fibers between parts of the central nervous system. 2. (PORIF) A fascicular column of spicules.
Tragardh's organ (ARTHRO: Chelicerata) In Acari, a long, conical hyaline protuberance of the articulation between the body of a chelicera, and its movable jaw; oncophysis.
tragus n. [Gr. tragos, goat] (ARTHRO: Insecta) In Diptera, a
somewhat elaborate lobe on the rim of the pinna of a laticorn trumpet of some culicid pupae.
transad n. [L. trans-, across; Gr. ad, makes collective nouns] Closely related organisms separated by an environmental barrier.
transcoxa n. [L. trans-, across; coxa, hip] (ARTHRO: Chelicerata) A term used instead of coxa in some groups.
transcurrent a. [L. trans-, across; currens, running] 1. Extending transversely. 2. (MOLL: Gastropoda) Passing continuously around whorls crossing growth lines.
transect n. [L. trans-, across; secare, to cut] A cross section or profile of an area for study, as with organisms and/or vegetation.
transection n. [L. trans-, across; secare, to cut] Cut across or transversely; a transverse section.
transformation zone In males, that part of the testis follicle in which the spermatids develop into spermatozoa; known as spermiogenesis. see maturation zone.
transient a. [L. trans-, across; ire, to go] A passing phenomenon; of short duration.
transient polymorphism Polymorphism existing in a breeding population during the period when an allele is being replaced by a superior one. see balanced polymorphism.
transitional cell see chromophile
translocation n. [L. trans-, across; locus, place] The shift of a segment of a chromosome to another chromosome, not changing the total number of genes present.
translucent a. [L. trans-, across; lucere, to shine] Allowing the passage of light, but not necessarily transparent; semitransparent.
transmission n. [L. trans-, across; mittere, to send] 1. Horizontal: the transfer of an infectious agent from one organism to another. 2. Vertical: transmission from one generation to another.
transposed hinge condition (MOLL: Bivalvia) A condition of teeth usually found in the hinge of one valve being found on the opposite one.
transscutal suture (ARTHRO: Insecta) 1 . In many orders, a transverse suture connecting the lateral margins behind the anterior notal wing process, dividing the scutum into an anterior and posterior region. 2. In some Hymenoptera, a suture dividing the posterior part of the scutum into two posterolateral areas called the axillae.
transstadial a. [L. trans-, across; stadium, stage] The retention of microorganisms from one stage of the host to the next; may be part or all of the host's life cycle.
transtilla n.; pl. -lae [L. trans-, across; stilla, drop] (ARTHRO: Insecta) In Lepidoptera, a transverse bar, or variously shaped process, connecting dorso-proximal angles of the male valva; part of the fultura superior; the anterior end of the dorsal extension of the 9th sternum or the vinculum.
transverse a. [L. trans-, across; vertere, to turn] Crossing at right angles to the longitudinal axis; lying across or between.
transverse band of crochets (ARTHRO: Insecta) In larva, crochets being arranged transversely or across the longitudinal axis of the body in a single uniserial or multiserial band, or in two such bands.
transverse costal vein (ARTHRO: Insecta) A wing cross vein in the costal cell.
transverse cubital vein (ARTHRO: Insecta) A transverse wing vein connecting the marginal and cubital veins.
transverse fission $A$ form of asexual reproduction by division of an organism at right angles to the long axis. see binary fission.
transverse impression see genal groove
transverse marginal vein (ARTHRO: Insecta) A wing cross vein in the marginal cell.
transverse notal suture see prescutal sulcus
transverse partition (BRYO) A wall separating members of a successive line of zooids.
transverse plane A plane or section perpendicular to the longitudinal axis.
transverse radial vein (ARTHRO: Insecta) A transverse mar-
ginal wing vein.
transverse septum (ARTHRO: Crustacea) In Cirripedia, the thin walled, normal to longitudinal septum, parallel to basis, dividing the parietal tubes into a series of cells.
transverse striation A circular groove or arc whose plane is perpendicular to the longitudinal axis.
transverse suture (ARTHRO: Insecta) In Diptera, a suture across the middle of the mesonotum of some species; usually incomplete in the center of the notum; in Tipulidae it is V-shaped.
transverse wall (BRYO: Gymnolaemata) One of a pair of walls separating individual zooids in a linear series; perpendicular to direction of growth
trapezium n. [Gr. trapezion, small table] A four-sided figure, having no two sides parallel; trapeziform.
trapezoid n. [Gr. trapezion, small table; eidos, shape] A plane four-sided figure in which two sides are parallel and two are not. trapezoidal, trapeziform a.
trema n.; pl. tremata [Gr. trema, hole] (MOLL: Gastropoda) An orifice in the outer wall of some shells, excretory in function; may occur singly or in a series.
Trematoda n. [Gr. trema, hole; eidos, form] A class of Platyhelminthes, commonly call flukes; all are endoparasitic flatworms.
trenchant a. [OF. trenchier, to cut] Having a sharp edge.
trepan n. [Gr. trypanon, borer] (ANN: Polychaeta) Part of the eversible pharynx containing chitinized teeth anteriorly, especially Syllidae.
triact n. [Gr. treis, three; aktis, ray] (PORIF) A microsclere spicule with three rays. see regular triact, saggital triact.
triactinal a. [Gr. treis, three; aktis, ray] (PORIF) Having a three-pointed or rayed spicule. see diactinal, tetractinal, monactinal.
triad n. [Gr. treis, three; -ad, forms collective noun] An arrangement of three; a trinity.
triaene n . [Gr. triaina, trident] (PORIF) A tetraxonid spicule
with three rays shorter than the fourth.
triage $n$. [F. a culling] The process of grading.
triangle $n$. [L. triangulus, having three angles] (ARTHRO: Insecta) In Odonata, a small triangular cell or group of cells near the base of the wing; discoidal triangle; cardinal cell. triangulate $a$.
triangular plates (ARTHRO: Insecta) In Hymenoptera, the second of three pairs of movable plates associated with the sting. see quadrate plates, oblong plates.
triaulic a. [L. tres, three; aulos, pipe] (MOLL: Gastropoda) In opisthobranch hermaphroditic snails, the female part having two separate openings and the male part one. see diaulic, monaulic.
triaxial symmetry A type of symmetry such as biradial- or bilateral symmetry, with three axes known as sagittal, longitudinal, and transverse.
triaxon n. [Gr. tries, three; axon, axle] (PORIF) A spicule with three axes.
tribe n. [L. tribus, tribe] A taxonomic category containing a group intermediate between the genus and the subfamily; names of tribes end in -ini.
tribocytic organ (PLATY: Trematoda) In Strigeiudea, a glandular, pad-like organ behind the acetabulum.
trichite n. [Gr. trix, hair] (PORIF) Hair-like siliceous spicule.
trichobothrium n.; pl. -ria [Gr. thrix, hair; bothros, pit] (ARTHRO: Chelicerata) A compound structure of many groups consisting of a small cavity (bothridium) and variously shaped setae (bothridial setae) that function as vibro- and anemoreceptors.
trichobranchia n.pl. [Gr. thrix, hair; branchia, gill] (ARTHRO: Crustacea) A gill with a series of filamentous lateral branches arising from the main stem or branchial axis. trichobranchiate a.
trichocerous a. [Gr. thrix, hair; keras, horn] (PLATY: Trematoda) Pertaining to cercaria having a tail provided with conspicuous spines or bristles.

## trichodes see tricomes

trichodragmata n.pl. [Gr. thrix, hair; dragma, sheaf] (PORIF: Desmospongiae) In Axinellidae ( Tragosia ), raphides grouped into bundles.
trichogen n. [Gr. thrix, hair; genes, producing] (ARTHRO: Insecta) An epidermal cell that secretes the cuticle of the seta or peg, the scolopale and the pore tubules.
trichoid a. [Gr. thrix, hair; eidos, form] Formed like a hair.
trichoid sensilla see sensillum trichodeum
trichomes, trichodes n.pl. [Gr. thrix, hair] 1. (ARTHRO: Insecta) Modified tufts or hair on certain myrmecophilous and non-myrmecophilous insects that aid in the dissemination of appeasement or pheromone substances. 2. (ARTHRO: Diplopoda) Hollow spines or setae of the bristly millipedes.
trichophore n. [Gr. thrix, hair; pherein, to bear] (ANN) A saclike structure or cavity from which setae emerge.
trichopore n. [Gr. thrix, hair; poros, channel] (ARTHRO: Insecta) A pore in the cuticle through which a sensory hair or bristle is formed.
trichosors n.pl. [Gr. thrix, hair] (ARTHRO: Insecta) In Neuroptera, thickenings of the wing margin bearing several hairs; a single trichosor between each pair of vein-endings in adults.
trichostichal bristles see metapleural bristles
trichotomous a. [Gr. tricha, in three parts; tome, a cutting] Divided into three parts; three-forked.
trichroism n. [Gr. treis, three; chros, color] The condition of having three color forms in different individuals of the same species.
tricolumella see columella
tricostate a. [Gr. treis, three; costa, rib] Having three ribs or ridges.
tricrepid a. [Gr. treis, three; krepis, base] (PORIF) A triaxonid desma.
tricuspid, tricuspidate a. [Gr. treis, three; cuspis, a point] Divided into three cusps or points.
tridactyl a. [Gr. treis, three; daktylos, finger] (ARTHRO) Per-
taining to an appendage, ambulacrum, or claw with three ungues. see monodactyl, bidactyl.
trident a. [L. tres, three; dens, tooth] Having three teeth; three-pronged. tridentate $a$.
trifid a. [L. tres, three; findere, to split] Having three clefts, parts, or branches.
trifid nerve (BRYO) A three-branched peripheral motor nerve connected to the retractor muscle, esophagus, and along the tentacle sheath to the direct nerve.
trifurcate a. [L. tres, three; furca, fork] Having three branches or forks; trichotomous.
triglycerides n.pl. [Gr. treis, three; glykys, sweet] Esters of fatty acids with glycerin that form fats and oils.
trignathan a. [Gr. treis, three; gnathion, jaw] (ARTHRO) Having mandibles and two pair of maxillae, such as Chilopoda, Symphyla and Insecta. see dignathan.
trigonal a. [Gr. treis, three; gonia, angle] Pertaining to, or in the form of a triangle.
trigoneutism n. [Gr. treis, three; gonos, offspring] The production of three broods in one season.
trilabiate a. [L. tres, three; labium, lip] Having three lips.
trilateral a. [L. tres, three; latus, side] Three-sided.
trilobate a. [Gr. treis, three; lobos, lobe] Bearing three lobes.
trilocular a. [L. tres, three; loculus, small place] With three cavities or cells.
trimorphic a. [Gr. treis, three; morphe, form] Having three distinct forms in one individual, as certain hydrozoan colonies. trimorphism $n$.
Trinominal nomenclature An extension of the binominal system of nomenclature consisting of three words: the generic name, the specific name, and the subspecific name, together constituting the scientific name of a subspecies.
triordinal crochets (ARTHRO: Insecta) Crochets of larvae with proximal ends in a single row, but distal ends of three alternating lengths. see ordinal.
tripartite a. [L. tres, three; partitus, divided] Divided into
three parts, divisions or segments.
tripectinate a. [L. tres, three; pecten, comb] Having three rows of comb-like branches.
triplet n. [L. tres, three; plus, more] Three successive nucleotide base pairs that code for an amino acid.
triploblastic a. [Gr. triploos, threefold; blastos, bud] Derived from three embryonic germinal layers: ectoderm, endoderm and mesoderm.
triploid a. [Gr. triploos, threefold] A cell or individual having three haploid chromosome sets in their nuclei; a form of polyploidy.
triquetral, triquetrous a. [L. triquetrus, three sided] Having three angles or arms; triangular in section.
triradiate(s) a. [L. tres, three; radius, spoke of wheel] 1. Having three radiating process. 2. (PORIF) Spicules having the three rays somewhat in the same plane. see sagittal triradiates.
tritocerebral commissure see postesophageal commissure
tritocerebral segment see tritocerebrum
tritocerebrum n. [Gr. tritos, third; L. cerebrum, brain] (ARTHRO) The posterior (third) small part of an arthropod brain that gives rise to nerves that innervate the labium, the digestive tract (stomatogastric nerves), the chelicerae of chelicerates, and the second antennae of crustaceans. see metacerebrum.
tritonymph n. [Gr. tritos, third; nymphe, young woman] (ARTHRO: Chelicerata) In Acari, the third stage nymph.
tritosternum n. [Gr. tritos, third; sternon, chest] (ARTHRO: Chelicerata) In Mesostigmata, a secondary, ventral, bristlelike sensory organ just behind the gnathosoma.
triturate v.t. [L. tritum, rub to pieces] To rub or grind to a fine powder; masticate; pulverize.
triungulin, triungulinid $n$. [L. tres, three; ungula, claw] (ARTHRO: Insecta) First-instar larva of some hypermetamorphic Neuroptera, Coleoptera, Hymenoptera, and the Strepsiptera (triungulinid), which are active, compodeiform
oligopods. see planidium.
trivial name An obsolete designation by Linnaeus for the specific name; vernacular name.
trivium n. [L. trivium, crossroads] (ECHINOD: Asteroidea) Collectively, the three rays of a sea star farthest from the madreporite. see bivium.
trivoltine n. [L. tres, three; It. volta, time] (ARTHRO: Insecta) Having three annual broods, especially in the silkworms of Bombycidae.
trixenic a. [Gr. treis, three; xenos, guest] The rearing of one or more individuals of one species in association with three known species of organisms. see axenic, dixenic, monoxenic, polyxenic, synxenic, xenic.
troch n. [Gr. trochos, wheel] A band of cilia found on trocophores and related larvae.
trochal disc (ROTIF) Anterior ciliated disc functioning in locomotion and/or food ingestion.
trochalopodous a. [Gr. trochos, wheel; pous, foot] (ARTHRO: Insecta) Refers to a posterior coxae having an articulation of a ball and socket joint. see pagiopodous.
trochantellus n . [Gr. dim. trochanter, runner] (ARTHRO: Insecta) In Hymenoptera, the proximal end of the femur; sometimes appearing as a second segment of the trochanter.
trochanter n. [Gr. trochanter, runner] (ARTHRO) A segment or segments of an insect or acarine leg that articulate basally with the coxa and distally with the femur; a pivot or rocking joint; the first cheliceral segment.
trochanteral organ (ARTHRO: Insecta) In Collembola, a group of short setae on the trochanter.
trochantin n. [Gr. trochanter, runner] (ARTHRO: Insecta) Any small intercalated sclerite of an insect appendage. a. The basal segment of the trochanter when two-jointed. b. A small sclerite in the thoracic wall, just anterior to the base of the coxa.
trochiform a. [Gr. trochos, wheel; forma, shape] 1. Shaped like a top. 2. (MOLL: Gastropoda) In Trochidae, a flat-sided
conical shell, without a highly acute spire and rather flat at the base.
trochlea n. [Gr. trochilia, pulley] A pulley-like structure, short, circular, compressed and contracted in the middle of the circumference.
trocholophous a. [Gr. trochos, wheel; lophos, crest] (BRACHIO) A lophophore with a simple disk around the mouth, bearing usually a single row of unpaired filamentary appendages, rarely a double row of paired appendages.
trochophore n. [Gr. trochos, wheel; phora, bearing] An invertebrate free-swimming larva found in many groups, marine turbellarians, nemerteans, brachiopods, phoronids, bryozoans, mollusks, sipunculids, and annelids, commonly pear-shaped and provided with a prominent equatorial band of cilia and sometimes one or two accessory ciliary circlets.

## trochosphere see trochophore

trochus n.; pl. trochi [Gr. trochos, wheel] (ROTIF) The inner, anterior circlet of coronal cilia along the margin of the apical band; cingulum.
troglobiont n. [Gr. trogle, hole; bios, life] A cave dwelling organism; troglobite.
troglodytic a. [Gr. trogle, hole; dyein, to enter] Living underground only.
troglophile n. [Gr. trogle, hole; philein, to love] 1. Cave-loving. 2. (ANN: Oligochaeta) Many species of earthworms are referred to in this manner, however, they are not obligatory troglophiles.
trogloxene n. [Gr. trogle, hole; xenos, guest] 1. A cave guest. 2. Sometimes used to characterize organisms that do not complete all of their life cycle in caves.
tropeic a. [Gr. tropis, keel] Resembling a keel; cariniform.
trophallaxis n. [Gr. trophe, food; allaxis, exchange] (ARTHRO: Insecta) The mutual or unilateral exchange of alimentary canal liquid, from the mouth or anus, among colony members of social insects or guests; trophobiosis. trophallactic a.
trophamnion n. [Gr. trophe, food; amnion, membrane around the fetus] (ARTHRO: Insecta) An envelope surrounding the embryonic mass in the polyembryonic ova of mainly parasitic Hymenoptera, formed by cytoplasm in the egg associated with the paranuclear mass, and functioning in relaying nutrients from the host.
trophi n.pl.; sing. trophus [Gr. trophe, food] 1. (ARTHRO) The mouth parts, especially of insects and barnacles, collectively. 2. (ROTIF) The mastacatory apparatus of the mastax. trophal , trophic a.
trophic chord (ARTHRO: Insecta) In telotrophic ovarioles, slender chords connecting the nurse cells to the eggs.
trophic egg (ARTHRO: Insecta) In Apis, an egg that is fed to the colony members, usually degenerate and nonviable.
trophic sac/pouch (ARTHRO: Insecta) In Siphunculata (Anoplura), a pouch opening off the cibarium housing three closely compressed stylets, with only the anterior end exposed, functioning in piercing the skin for blood meals.
trophic symbiosis $A$ form of symbiosis between a social insect and another organism; tended by the social insect for the sake of the food or secretions they derive from them. see trophallaxis, trophobiont.
trophidium n. [Gr. dim. trophe, food] (ARTHRO: Insecta) In Hymenoptera, the first larval stage of some Formicidae.
trophobiont n. [Gr. dim. trophe, food; bios, life; ont, one who] (ARTHRO: Insecta) An organism living in a social species nest, or cared for and protected by a social species in return for secretions which are then consumed. see mutualism.
trophobiosis n. [Gr. trophe, food; biosis, manner of life] A form of symbiosis in which there is a mutual exchange of food; trophallaxis. trophobiotic a. see trophic symbiosis.
trophocytes n.pl. [Gr. trophe, food; kytos, container] 1. Cells that provide nutritive material. 2. (ARTHRO: Insecta) Cells of the fat body of the embryo. 3. (PORIF) In fresh-water sponges, nurse cells involved in the initial stages of gemmule formation; archaeocytes.
trophodisc n. [Gr. trophe, food; diskos, disc] (CNID: Hydrozoa) In the female gonophore, endodermal tissue that nourishes sperm or ova.
trophogeny $n$. [Gr. trophe, food; genes, producing] (ARTHRO: Insecta) In social insects, caste difference determined by nutritional mechanism.
trophoporic field (ARTHRO: Insecta) In social insects, the environment from which the colony gains food.
trophorhinium n. [Gr. trophe, food; rhine, rasp] (ARTHRO: Insecta) In Hymenoptera, two striated plates located within the mouth of Myrmeciinae larvae that grind their food pellets.
trophosome n. [Gr. trophe, food; soma, body] 1. (CNID: Hydrozoa) All of the asexual structures of a polyp or polypoid hydrozoan colony. see gonosome. 2. (NEMATA) A food storage area of certain parasitic nematodes formed by modification of the intestine.
trophotaxis n. [Gr. trophe, food; taxis, arrangement] A response to the stimulation of food. see telotaxis, klinotaxis.
trophothylax n. [Gr. trophe, food; thylax, sack] (ARTHRO: Insecta) In Hymenoptera Formicidae, a specialized pouch of Pseudomyrmecinae larvae located on the ventral part of the thorax just beneath the mouth parts that receives food pellets; a feed bag.
trophozooid see gastrozooid
trophus see pl. trophi
tropis n. [Gr. tropus, keel] 1. (ARTHRO: Crustacea) In Ostracods, a heavy chitinous (or two unfused rods) connecting the zygum to the sternix and pastinum. 2. (NEMATA: Adenophorea) In Enoplida, a hollow tooth-like structure formed by a subventral wall of the buccal capsule.
tropism n. [Gr. tropos, turn] A movement, orientation or locomotion of a motile organism in response to a stimulus. a. Positive tropism: toward the stimulus. b. Negative tropism: away from the stimulus. see taxis.
tropotaxis n. [Gr. tropos, turn; taxis, arrangement] A type of
taxis in which an animal directs itself in relation to a source of stimulation by comparing the amount of stimulation on either side of it, i.e., spiders in their web retrieving their prey. see klinotaxis, telotaxis.
trumpet $n$. [OF. trompe, trumpet] (ARTHRO: Insecta) In Diptera, paired, usually movable respiratory structures, located on the dorsal portion of the cephalothorax of culicid pupae. see laticorn trumpet, angusticorn trumpet.
truncate a. [L. truncus, cut off] Terminating abruptly; ending squarely with a cut-off edge. truncation $n$.
trunk n. [L. truncus, cut off] 1. (ANN) a. In Polychaeta, the body between the peristomium and the pygidium. b. In Oligochaeta, the body between the peristomium and periproct. 2. (ARTHRO: Crustacea) The postcephalic portion of the body. 3. (ARTHRO: Insecta) The thorax.
trypsin n. [Gr. tryein, to rub down; pepsis, digestion] An enzyme that catalyzes the hydrolysis of proteins. tryptic a.
tryptophan, tryptophane n. [Gr. tryein, to rub down; phanein, to appear] An amino acid existing in proteins, from which it is set free by tryptic digestion, that gives a red or violet color on oxidation; it is essential to animal life.
T-tubule Invaginations of the plasma membrane into the muscle fiber between the Z - and H -bands.
tube n. [L. tubus, tube] Any hollow, cylindrical structure.
tube-feet (ECHINOD) Small, fluid-filled tubes of the water vascular system functioning in locomotion, adhesion, food capture and transport to the mouth; some are sensory and may assist in respiration.
tubercle n. [L. dim. tuber, hump] 1. A small knoblike or rounded protuberance. see torus. 2. (ARTHRO: Insecta) In Diptera, sometimes used for an elongate facial swelling. tuberculate, tuberculose a.
tubercula pubertatis (ANN: Oligochaeta) A glandular swelling near the ventrolateral margin of the clitellum of mature adult earthworms during copulatory phase; differs in size, shape and continuity.
tuberiferous a. [L. dim. tuber, hump; fero, bear] Bearing tu-
bercles.
tube tracheae (ARTHRO: Chelicerata) In Opiliones, Solifugae and most spiders, tube-like tracheae; usually unbranched ectodermal invaginations. see sieve tracheae.
tubicolous a. [L. tubus, tube; colere, to dwell] Inhabiting a tube; a tubular spider web.
tubifacient a. [L. tubus, tube; facere, to make] Tube constructing.
tubule n. [L. dim. tubus, tube] A minute tube.
tubulus n. [L. dim. tubus, tube] (ARTHRO: Insecta) In Lepidoptera, a tubular, telescoping ovipositor.
tubus n. [L. tubus, tube] (NEMATA) A cuticular projection surrounding the spicules beyond the body outline; cloacal tubus.
tuft sensilla (ARTHRO: Crustacea) In Decapoda, small branched hairs over pores in the carapace with two or three attached neurons, functioning in vibration and water movement detectors.
Tullgren funnel Apparatus designed by A. H. Tullgren for extraction of animals from duff and litter; the sample is placed on a sieve and heat is applied from above to drive the animals downward into a funnel with a collecting vessel below; similar to a Baerman funnel that uses a water interface between sample and collecting vessel.
tumefaction n. [L. tumere, to swell; facere, to make] Abnormal tissue formations in invertebrates having characteristics in common with vertebrate neoplasms, however, precise nature is unknown.
tumescence n. [L. tumescere, to swell up] Slightly tumid or enlarged.
tumid a. [L. tumere, to swell] Swollen; enlarged; abnormally distended.
tumulus n. [L. tumulus, mound] (ARTHRO: Insecta) In Apis, a pile of earth at the mouth of an underground burrow.
tun n. [L. tunica, garment] (TARDI) A cryptobiotic shriveled, state of tardigrades produced by evaporation of surrounding water film.
tunic $n$. [L. tunica, garment] A covering membrane or tissue.
tunica n.; pl. -cae [L. tunica, garment] 1. A covering or enveloping membrane or tissue; a tunic. 2. (ARTHRO: Insecta) For Lepidoptera see diaphragm.
tunica adventitia Outermost fibro-elastic layer of various tubular organs, such as vas deferens, esophagus, uterus, ureter, etc.
tunica intima An inner lining or membrane.
tunica propria (ARTHRO: Insecta) In females, an elastic membrane, with or without fine fibrils, that encloses the ovariole and terminal filament.
tunicary a. [L. tunica, garment] Pertaining to a covering membrane or a tunic.
tunicate a. [L. tunica, garment] 1. Having a tunic. 2. (ARTHRO) Applied to coupling joint of antennae.
turbinate a. [L. turbo, a whirl] Top-shaped; nearly conical with a round base; turbiniform.
turbinate eye (ARTHRO: Insecta) In male Baetidae Ephemeroptera, eyes enlarged, divided into lower and outer pigmented ovals and raised on a broad stalk, with larger upper and inner portion usually pale with large facets.
turgid a. [L. turgidus, swollen] Swollen; distended.
turreted a. [L. turris, a tower] Tower-shaped.
turriculate a. [L. dim. turris, tower] (MOLL: Gastropoda) Having an acutely conical spire comprised of numerous flattish whorls; turriform; turrited.
tychoparthenogenesis n. [Gr. tyche, change; parthenos, virgin; genesis, beginning] Unfertilized eggs that can occasionally, or accidentally, develop through parthenogenesis.
tylasters n. [Gr. tylos, knob; aster, star] (PORIF) A starshaped spicule with a small center and knobbed rays.

## tylenchoid bursa see bursa

tylenchoid esophagus (NEMATA: Secernentea) An esophagus with a narrow procorpus, a strongly formed median bulb (metacorpus), followed by a narrow typical isthmus and terminating with a glandular basal bulb.
tyloid n.; pl. tyloides [Gr. tylos, knob] (ARTHRO: Insecta) In Trigonalidae and Ichneumonidae, any large indented, flattened or raised sensory area on the antennae.
tylosis n.; pl. -es [Gr. tylos, knob] A hardening or thickening; a callous.
tylostyle a. [Gr. tylos, knob; stylos, column] (PORIF) A monactinal monaxon knobbed at the broad end and pointed at the other. see subtylostyle.
tylote n. [Gr. tylos, knob] (PORIF) A diactional monaxon in which both broad ends are knobbed.
tylus n.; pl. tyli [Gr. tylos, knob] (ARTHRO: Insecta) The distal part of the clypeal region of the head.
tymbal n. [F. timbale, kettledrum] (ARTHRO: Insecta) In Hemiptera (Cicadidae), an area of thin cuticle supported by a cuticular rim and a series of dorso-ventral strengthening ribs; involved in sound production. see Pearman's organ.
tympanal air chamber (ARTHRO: Insecta) An air-sac or space, usually posterior to the tympanal organ into which outside air is admitted by a spiracle allowing the tympanum to vibrate freely.
tympanal bullae see tympanal hood
tympanal fossa (ARTHRO: Insecta) In Diptera, a largely membranous area between the suprasquamal ridge and the lower margin of the postalar wall.
tympanal frame (ARTHRO: Insecta) The supporting framework of the tympanal membrane.
tympanal hood (ARTHRO: Insecta) In some Lepidoptera, one of a pair of tubercles or rounded prominences on the dorsal surface at the base of the first abdominal segment.
tympanal organs (ARTHRO: Insecta) Specialized chordotonal organs that occur on prothoracic legs, mesothorax, metathorax, or abdomen; the auditory organ or eardrum.
tympanal pockets (ARTHRO: Insecta) In Lepidoptera, pockets in the tympanal frame, usually 4 in number.
tympanal ridge (ARTHRO: Insecta) In some Diptera, a rib-like sclerite forked anteriorly, forming a single or double $Y$ that encloses the tympanic pit.
tympanic pit (ARTHRO: Insecta) In Diptera, a membranous area opening toward the base of the wing, enclosed by the two lowermost arms of the tympanal ridge.
tympanum n.; pl. -ana [Gr. tympanon, drum] (ARTHRO: Insecta) A vibrating membrane involved in hearing; typanic membrane; an auditory membrane.
Tyndall colors or scattering (ARTHRO: Insecta) Color of certain insects resulting from interference of light reflected by granules cast upon an absorbing layer of dark pigment beneath a more or less transparent cuticle; producing blue, green or white, depending upon the size of granules.
type n . [Gr. typos, type] A zoological object that serves as the base for the name of a taxon.
type by absolute tautonomy see type by original designation
type by elimination A type designated when some of the original species of a genus have been transferred to other genera, the type of the genus selected from among the original species that remain in the genus. ICZN
type by original designation A species designated as type in the original publication of a genus. a. If in the original publication of a genus, typicus or typus is used for any of the species. b. The species in a proposed new genus (monotypical genus). c. In a genus containing a number of species, one original species has the generic name as its specific or subspecific name, whether a valid name or a synonym (type by absolute tautonomy). ICZN
type by virtual tautonomy An original species of a genus that has a specific or subspecific name, either as a valid name or a synonym, is virtually the same as the generic name, or of the same origin or meaning. ICZN
type genus In families, the specific genus on which the family is founded, not necessarily the first one described.
type host A designated organism from which a type specimen has been collected.
type locality The area from which a holotype, lectotype, or neotype was collected.
type method The method by which the name for a taxon is unquestionably associated with a definite zoological object belong to the taxon.
type species The species which was used by the author of a genus to designate as type of a nominal genus.
typhlosole n. [Gr. typhlos, blind; solen, channel] A longitudinal infolding of the dorsal intestinal wall into the intestinal lumen.
typologist n. [Gr. typos, type; logos, discourse] One who disregards variation and who considers the members of a population as replicas of the type.
typolysis n. [Gr. typos, type; lysis, loosing] Phylogerontic; stage that precedes extinction of a type organism or group.
typostasis n. [Gr. typos, type; stasis, standing] A static phase in evolution.

