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Online Dictionary of Invertebrate Zoology: D

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D

dacryoid a. [Gr. *dakryon*, tear; *eidos*, form] Tear-shaped.

dactyl n.; pl. **-tyles** [Gr. *daktylos*, finger] 1. A finger or toe; a dactylus; a pretarsus; a digit. 2. (ARTHRO: Crustacea) The ultimate segment of a thoracopod; a dactylopodite.

dactylethra n. [Gr. *daktylethra*, finger sheath] (BRYO: Stenol-aemata) A degenerate feeding zooid closed by a terminal diaphragm, or an aborted, shortened polymorph.

dactylognathite n. [Gr. *daktylos*, finger; *gnathos*, jaw] (ARTHRO) The distal segment of a maxilliped.

dactyloid a. [Gr. *daktylos*, finger; *eidos*, form] Finger-like.

dactylopod(ite) n. [Gr. *daktylos*, finger; *pous*, foot] (ARTHRO) 1. The terminal segment of a generalized leg or appendage usually claw-like; the pretarsus. 2. For Crustacea see **dactyl**.

dactylopore n. [Gr. *daktylos*, finger; *poros*, passage] (CNID: Hydrozoa) An opening in the coenosteum of a milleporinan coral for a dactylozooid.

dactylozooid n. [Gr. *daktylos*, finger; *zoon*, animal] (CNID: Hydrozoa) In colonial hydrozoans, a hydroid modified for protection and the capture of prey; protective polyp, zooid or machozoid; a hydrocyst; a palpon. see **tentaculozooid**, **gastrozooid**.

dactylus n. [Gr. *daktylos*, finger] 1. (ARTHRO: Insecta) A structure of the tarsus. 2. (MOLL: Cephalopoda) see **tentacle**.

dance n. [OF. *dancer*, dance] (ARTHRO: Insecta) Communicative movements of honeybees, usually performed on their combs.

daphnid a. [Gr. *daphne*, laurel] (ARTHRO: Crustacea) Any water flea, esp. those in the genus *Daphnia*.

dart n. [OF. *dard*, dagger] 1. Anything that pierces or wounds. 2. (ECHINOD) The spiculum. 3. (MOLL: Gastropoda) A sting

or dart of certain snails.

dart sac (MOLL: Gastropoda) A muscular caecum of the vagina that produces a fine-pointed calcareous shaft that is 'shot' by partners before courtship, lodging in the integument and releasing a stimulus for courtship behavior.

Darwinism n. [C. Darwin, English naturalist] The theory of species origin through natural selection working on small inherited differences in individuals.

dauer larvae (NEMATA) A quiescent stage entered by some parasitic larvae while enclosed in the cast cuticle of the previous stage.

dauermodification n. [Ger. *dauer*, duration; L. *modificare*, to regulate] Character change usually induced by extreme environmental factors that survives for several generations.

daughter n. [A.S. *dohter*, daughter] The offspring of a division, not implying sex, such as in daughter cells or daughter nucleus; a daughter chromosome applies to chromatids after metaphase.

daughter cells The two cells resulting from division of a single cell.

daughter cyst (PLATY: Cestoda) Fluid filled bladder with protoscolexes formed by exogenous budding of the germinal epithelium of a unilocular hydatid cyst.

day-eye (ARTHRO: Insecta) The apposition eyes adapted for use in daytime when light is abundant.

dealate, -ated a. [L. *de*, away from; *alatus*, winged] (ARTHRO: Insecta) Loosing wings, as ants and termites, by casting or breaking off. **dealation** n.

death n. [A.S. *death*, death] Irreversible cessation of the activities and breakdown of the structure of protoplasm.

deaurate a. [L. *de*, away from; *auratus*, golden] Having a gold color that appears rubbed or worn.

decacanth n. [Gr. *deka*, ten; *akantha*, thorn] (PLATY: Cestoda) A ten-hooked larva that hatches from the egg; a lycophore.

decalcification n. [L. *de*, away from; *calcarius*, of lime; *ficare*, to make] Loss of calcium salts from living tissues; removing calcium salts from tissues with acids.

- decamerous** a. [Gr. *deka*, ten; *meros*, part] Having ten parts or divisions.
- decapodid larvae** (ARTHRO: Crustacea) Larvae of Decapoda that swim with their pleopods; a megalopa stage larva.
- decathecal** a. [Gr. *deka*, ten; *theke*, case] (ANN: Oligochaeta) Earthworms having ten spermathecae, usually in five pairs.
- decephalic** a. [L. *de*, away from; Gr. *kephale*, head] (ARTHRO: Insecta) Having a prognathous head with structures dividing the foramen.
- deciduous** a. [L. *deciduus*, falling off] Having a part or parts that may fall off or be shed.
- deck** n. [D. *dek*, cover] (MOLL) A septum or small sheet of shelly substance in the umbonal region connecting the anterior and posterior ends of a valve.
- declinate** a. [L. *de*, away from; *clinatus*, sloping] Bending aside in a curve with the apex downward.
- declivitous, declivous** a. [L. *de*, away from; *clivis*, hill] Sloping downward; gradually descending.
- decollate a. [L. *de*, away from; *collum*, neck] (MOLL: Gastropoda) Pertaining to cut or broken off, as the apex on some land gastropods; wearing away at the apex; decapitation or discarding the apical whorls.
- deconjugation** see **desynapsis**
- decorticate** v.t. [L. *de*, away from; *cortex*, bark] To divest of the exterior coating; deprived of the cortex or outer coat.
- decticious a. [Gr. *dektikos*, biting] (ARTHRO: Insecta) Having functional mandibles in the puparium, cell, or cocoon. see **adecticious**.
- decumbent** a. [L. *decumbere*, to lie down] Bending downward; upright at the base and bending down at the tip.
- decurved** a. [L. *de*, away from; *curvus*, bend] Bowed or curved downward.
- decussated** a. [L. *decussatus*, formed crosswise like the letter X] 1. Intersected; striations or bristles crossing at acute angles forming a series of X's. 2. (ARTHRO: Insecta) Pertaining to bristles of some Diptera. 3. (MOLL: Gastropoda)

Pertaining to radial ribs.

- dedetermination** n. [L. *de*, away from; *determinare*, to limit] Reversion of cells to their embryonic state.
- dedifferentiation** n. [L. *de*, away from; *differentia*, difference] Loss of traits of specialized cells formed during the course of differentiation.
- defaunate** n. [L. *de*, away from; *Fauna*, deity of herds and fields] To remove from an organism its commensalistic or mutualistic microfauna, for which the organism ordinarily serves as a host.
- defecate** v.i. [L. *defaecare*, to void excrement] To void feces.
- deferent** a. [L. *de*, away from; *ferre*, to carry] Carrying away; deferent duct.
- deficiency** n., pl. **-cies** [L. *deficiens*, wanting] Structural change resulting in the loss of a terminal part of a chromosome.
- definition** n. [L. *definitus*, limited] 1. Limitation; defining limits. 2. In taxonomic work, the formal statement of characters delimiting the taxonomic category.
- definitive host** One in which the terminal (frequently sexual) stage of the parasite occurs; primary host. see **intermediate host**.
- definitive reservoir** A host or location in which a natural supply of the terminal stage (frequently sexual) of a parasite occurs.
- deflected** a. [L. *de*, away from; *flectere*, to bend] 1. Bent backward or to one side or downward. 2. (ARTHRO: Insecta) Wings having the inner margins lapping and the outer margins declining toward the sides.
- deflected front** (ARTHRO: Crustacea) In some Decapoda, the broadly downturned front margin of the carapace.
- deflexed** a. [L. *de*, away from; *flectere*, to bend] Bent abruptly downward.
- defoliator** n. [L. *de*, away from; *folium*, leaf] Any agent, animal or chemical that destroys the leaves of plants.
- deformed** a. [L. *deformis*, misshapen] 1. Disarranging or set-

ting in an unusual form. 2. (ARTHRO: Insecta) The knotted or twisted antennae in male Meloidae.

degenerate v.i. [L. *degenerare*, to depart from its kind] To retrogress to a lower type; to deteriorate.

degenerate code The genetic code in which more than one nucleotide triplet codes for the same amino acid.

degeneration n. [L. *degenerare*, to depart from its kind] A progressive deterioration to a less specialized or functionally less active form; retrogressive development.

dehiscence n. [L. *dehiscere*, to split open] The cracking, splitting or tearing of an opening in an organ or structure along lines of weakness. **dehiscent** a.

deirids see **cervical papillae**

delamination n. [L. *de*, away from; *lamina*, a thin plate] 1. Split or divided into layers, as cells forming a new layer. 2. Gastrulation in which the endoderm is split off as a layer from the internal surface of the blastoderm.

delimitation n. [L. *de*, away from; *limes*, boundry] 1. Setting or marking a boundry. 2. In taxonomy, a formal statement of the characters of a taxon that establishes its limits. see **description, diagnosis, differential diagnosis**.

delthyrium n.; pl. **-ria** [Gr. 4th letter, delta; thyron, door] (BRACHIO) The central triangular notch in the ventral valve, open to the hinge line; facilitating the passage of the pedicle; usually closed off from the hinge plate by the deltidium. **delthyrial** a. see **notothyrium**.

deltidial plates (BRACHIO) A plate or pair of plates growing medially from the margin of the delthyrium, almost or completely closing it.

deltidium n.; pl. **-tidia**, [Gr. 4th letter Δ , *delta*; *-idion*, dim.] (BRACHIO) A plate that closes off the delthyrium, in some forms there are two plates; also called pseudodeltidium.

deltoid a. [Gr. 4th letter Δ , *delta*; *eidōs*, shape] Triangular in shape.

demanian system (NEMATA) A complex system consisting of paired efferent tubes connecting the intestine and uteri

with one another and sometimes posteriorly with the exterior; thought to be seminal storage tubes.

demarcation line (MOLL: Bivalvia) Imaginary line joining points on the beak with points of maximum transverse growth of the shell margin; forms dorsoventral profile.

deme n. [Gr. *demos*, people] A population within a species; an assemblage of potentially interbreeding individuals at a given locality.

demersal a. [L. *de*, away from; *mergere*, to plunge] Living on or near the bottom of a lake or sea.

demibranchs n.pl. [Gr. *demi*, half; *branchia*, gills] (MOLL: Bivalvia) A pair of ciliated gill filaments composed of two flat lamellae (inner demibranch and outer demibranch) in which there are blood vessels that facilitate respiration and mucociliary feeding.

demiplate n. [Gr. *demi*, half; OF. *plate*, flat] (ECHINOD) A reduced ambulacral plate in a compound plate in the test.

demi-provinculum n. [Gr. *demi*, half; *pro*, before; *vinculum*, bond] (MOLL: Bivalvia) One half of the median part of the hinge margin of the prodissoconch. see **prodissoconch**.

Demospongiae n. [Gr. *demos*, multitude; *spongos*, sponge] A class of sponges composed of spongin fibers alone or together with siliceous spicules that are differentiated into megascleres (larger size) or microscleres (smaller size) of diverse shapes.

denatant a. [L. *de*, away from; *natare*, to swim] Swimming, drifting or migrating with the current. see **contranatant**.

dendriiform a. [Gr. *dendron*, tree; L. *forma*, shape] Branched like a tree; dendroid.

dendrite n. [Gr. *dendron*, tree] Neural arborizations or branching fibrils that conduct impulses toward the neurocyte. **dendritic** a.

dendritic see **dendroid**

dendritic flame cells (ACANTHO) Central canal from which many smaller canals separate and end in pouches containing cilia.

dendritic thickening (BRYO) Extreme skeletal thickening along

axes of colony branches.

dendrobranch(ia) n. [Gr. *dendron*, tree; *branchia*, gills] (ARTHRO: Crustacea) A type of gill with lamellae divided into arborescent bundles.

dendrogram n. [Gr. *dendron*, tree; *gramma*, written character] Any branching, tree-like diagram designed to indicate degrees of relationship.

dendroid a. [Gr. *dendron*, tree; *eidos*, form] 1. Shrub-shaped; shaped like a small tree; dendriform. 2. (BRYO) A solid ramose colony. 3. (PORIF) A sponge skeleton branching repetitively with little or no anastomosis between successive branches.

dendron see **dendrite**

dendrophagous a. [Gr. *dendron*, tree; *phagein*, to eat] Feeding on woody tissues.

dendrophilous a. [Gr. *dendron*, tree; *philein*, to love] Living in woody tissue, or on trees.

denematize a. [L. *de*, away from; Gr. *nematos*, of thread] To divest of nematodes.

denizen n. [OF. *denzein*, one living within] Any animal that has become naturalized.

dens n.; pl. **dentes** [L. *dens*, tooth] 1. A tooth or tooth-like process. 2. (ARTHRO: Insecta) *a.* In Collembola, the proximal segment of the furcula (springing fork). *b.* Dentes=teeth or other pointed structures on the inner side of the mandible.

densariae n.pl. [L. *dens*, tooth] (ARTHRO: Insecta) Distinct thickenings of the margins of the incisurae of scale insects.

density-dependent factors Factors (direct or inverse) whose effects on a population are dependent upon the density of that particular population.

density-independent factors Factors whose effects on a population are not dependent upon the density of that particular population.

dentacerores n.pl. [L. *dens*, tooth; *cera*, wax; *os*, mouth] (ARTHRO: Insecta) In coccoids, irregularities in the membrane surrounding the anus; denticulate pores.

dental plates (BRACHIO) Plates of secondary shell supporting the hinge teeth on the ventral valve.

dental sclerite (ARTHRO: Insecta) The sclerite at each side of the base of the mandibular sclerite of muscid larvae.

dental sockets (BRACHIO) Excavations in the posterior margin of the brachial valve for reception of hinge teeth.

dentate a. [L. *dens*, tooth] Toothed, or with tooth-like processes.

dentatelirate a. [L. *dens*, tooth; *lira*, furrow] Having teeth and fine raised lines or grooves.

dentate-serrate Teeth with serrated dentations on the edges.

dentate-sinuate Teeth with a wavy indented margin.

denticles n.pl. [L. *denticulus*, little tooth] 1. Small, tooth-like projections. 2. (ARTHRO: Crustacea) In cirripeds, toothlet on the sutural edge of the radius of the compartment plate, or opposed buttress of adjoining plate. 3. (ANN: Polychaeta) The paragnaths. **denticulate** a.

dentigerous ridges Elevations bearing small teeth or tooth-like projections.

dentition n. [L. *dens*, tooth] 1. All teeth including different forms, sizes, etc. 2. (MOLL: Bivalvia) A collective term including hinge teeth and sockets.

denuded a. [L. *de*, away from; *nudus*, bare] Divested of all covering.

depauperate a. [L. *de*, away from; *pauper*, poor] 1. Impoverishing or exhausting. 2. Falling short of the natural size or development from being impoverished or starved. 3. (ARTHRO: Insecta) An impoverished or dying ant colony.

deportation n. [L. *de*, away from; *portare*, to carry] (ARTHRO: Insecta) In social insects, the transport of adults or young to a new nest.

depressed a. [L. *de*, away from; *pressus*, bear down] 1. Pressed or kept down; sunken below the general surface. 2. (MOLL: Gastropoda) Refers to a shell low in proportion to diameter.

depressor n. [L. *de*, away from; *pressus*, bear down] Any

muscle that lowers or depresses any appendage.

depressor ani (NEMATA) An H-shaped muscle that dilates the rectum and elevates the posterior lip of the anus.

depressor muscle crests (ARTHRO: Crustacea) In balanomorph barnacles, elevated denticles or ridges on the inner surface of the tergum near the basicarinal angle for attachment of the depressor muscles.

depuration n. [L. *de*, away from; *puratus*, cleanse] The act of cleansing; free from impurities.

derived character Any character that differs materially from the ancestral condition.

derma, dermis n. [Gr. *derma*, skin] 1. The layer of the cuticle, laminated in structure, beneath the epidermis. 2. (PORIF) The extreme outer surface layer of membrane or reinforcement by spicules and/or sand. **dermal** a.

dermal cells see **cellulae**

dermal glands 1. (ARTHRO: Crustacea) A cell or cells in the epidermis traversed by canals communicating with the surface through fine ducts. 2. (ARTHRO: Insecta) Hypodermal unicellular glands which secrete wax, cement, pheromones, etc.

dermalia n.pl. [Gr. *derma*, skin] (PORIF: Hexactinellida) Spicules at or beneath the dermal surface.

dermal pores see **cellulae**

dermatoblasts n.pl. [Gr. *derma*, skin; *blastos*, bud] (ARTHRO: Insecta) In an embryo, the outer thin layer of cells which form the ventral body wall. see **neuroblasts**.

dermatozoon n. [Gr. *derma*, skin; *zoion*, animal] Any animal parasitic on the skin.

dermis n. [Gr. *derma*, skin] (PORIF) The skinlike external covering.

dermoptic sense The response of an animal to light or shadow after removal of eyes and other photosensors.

dermosclerites n.pl. [Gr. *derma*, skin; *skleros*, hard] (CNID: Anthozoa) Calcareous spicules (sclerites) of alcyonarian coral polyps, produced by scleroblasts embedded in the

mesoglea or stolons (or both) or in the coenenchyma connecting the polyps.

dermoskeleton n. [Gr. *derma*, skin; *sketeto*, dried hard] The exoskeleton.

descending a. [L. *de*, away from; *scandere*, to climb] Directed downwards or caudad; detorse.

desclerotization n. [L. *de*, away from; Gr. *skleros*, hard] A reduction of sclerotin in sclerotized parts or structures.

description n. [L. *describere*, to delineate] In taxonomy, a more or less complete formal statement of the characters of a taxon without delimiting it from coordinate taxa. see **delimitation, diagnosis, differential diagnosis**.

desegmentation n. [L. *de*, away from; *segmentum*, piece] The fusion of segments formerly separated.

deserticolous a. [L. *desertum*, a waste place; *colere*, to inhabit] Desert-inhabiting.

desiccate v. [L. *desiccare*, to dry up] To dry up; a process of preserving.

desiccation n. [L. *desiccare*, to dry up] An inactive dry state of various invertebrates, directly referable to extreme, dry conditions.

desma n.; pl. **-mata** [Gr. *desmos*, bond] (PORIF: Demospongiae) In Lithistida, branched, irregular interlocking megascleres consisting of layers of silica irregularly deposited on ordinary spicules.

desmacyte n. [Gr. *desmos*, bond; *kytos*, container] (PORIF) Long slender cells in the cortex and around the internal channels; fiber cells.

desmen n.pl. [Gr. *desmos*, bond] (NEMATA: Adenophorea) Transverse rings around the bodies of Desmoscolecida; concretion rings.

desmergate n. [Gr. *desmos*, bond; *ergates*, worker] (ARTHRO: Insecta) A form of ant intermediate between the typical worker and the soldier; can also be used to designate the intermediate forms between the large and small workers in certain genera.

desmoneme n. [Gr. *desmos*, bond; *nema*, thread] (CNID: Hy-

drozoa) A small nematocyst of hydras with a short un-armed spirally coiled tubule, which functions in entangling and wrapping around bristles of prey; volvent.

desmosome n. [Gr. *desmos*, bond; *soma*, body] 1. That portion of a cell membrane specialized for adhesion to a neighboring cell. 2. (ARTHRO: Insecta) An attachment area between epidermal and muscle cells; the muscle fibrils of the muscles attach on one side and the epidermal microtubules attach on the other side of the desmosome. see **hemidesmosome**, **tonofibrillae**.

Desmospongiae n. [Gr. *desmos*, bond; *spongos*, sponge] A class of sponges encompassing 90% of all existing sponges with ancestry tracing back to simple Cambrian sponges (500 million years).

Desor's larva (NEMER) Oval ciliated postgastral stage (in the egg) of Lineus ; develops like the pilidium larva.

desquamation n. [L. *de*, away from; *squama*, scale] Peeling or scaling off of cuticle or epidermis in flakes.

desynapsis n. [L. *de*, away from; Gr. *synaptos*, joined together] Separation of paired chromosomes during the diplotene phase of the first meiotic division; desyndesis; de-conjugation. see **asynapsis**.

desyndesis see **desynapsis**

determinant n. [L. *de*, away from; *terminus*, limit] A hypothetical unit of inheritance.

determinate a. [L. *de*, away from; *terminus*, limit] Having well-defined outlines or boundary limits.

determination n. [L. *de*, away from; *terminus*, limit] A process that initiates a specific pathway of development among those that are available to the cell or embryo.

detorsion n. [L. *de*, away from; *torquere*, to twist] 1. The process of twisting back or removing torsion; unwinding. 2. (MOLL: Gastropoda) A term used to describe the reversal of torsion. see **orthoneury**, **torsion**.

detoxification, detoxication n. [L. *de*, away from; *toxicum*, poison] Removal of toxic materials by metabolizing them.

detriophagous a. [L. *detritus*, worn away; Gr. *phagein*, to eat]

Feeding on detritus.

detritivore n. [L. *detritus*, worn away; *vorare*, to devour] Any organism that feeds on detritus. **detritivorous** a.

detritus n. [L. *detritus*, worn away] An aggregate of fragmentary material, such as decomposing parts of plants and animals.

detorse a. [L. *de*, away from; *versus*, turn] Directed downward. see **antrorse**, **retorse**.

deutocerebrum see **deutocerebrum**, **mesocerebrum**

deuterostome n. [Gr. *deuteros*, second; *stoma*, mouth] True coelomates with radial cleavage of the egg, the blastopore becoming the anus, the coelom formed by enterocoely, including Echinodermata, Chaetognatha, Hemicordata and Chordata. see **protostome**.

deuterotoky n. [Gr. *deuteros*, second; *tokos*, birth] Parthenogenetic reproduction in which progeny of both sexes are produced from female gametes. see **arrhenotoky**, **thelytoky**.

deutocerebral commissure (ARTHRO) The connection between the sensory neuropiles on both sides of the brain.

deutocerebral region (ARTHRO) That portion of a brain divided into dorsal sensory and ventral motor areas.

deutocerebrum n. [Gr. *deuteros*, second; L. *cerebrum*, brain] (ARTHRO) The median region of a brain which receives the antennal nerves (first antennae in crustaceans, see mesocerebrum) and contains their association centers; lacking in chelicerates (scorpions, spiders and mites). **deutocerebral** a.

deutogyne n. [Gr. *deuteros*, second; *gyne*, woman] A female of a species which is morphologically different from the primogyne and has no male counterpart. see **protogyne**.

deutomalae n.pl. [Gr. *deuterous*, second; *malon*, cheek] 1. (ARTHRO: Symphyla) The second pair of mouth appendages in certain myriapods. 2. (CHAETO) A broad plate formed by the fusion of the second pair of mouth appendages.

deutonymph n. [Gr. *deuteros*, second; *nymphē*, chrysalis] (ARTHRO: Chelicerata) The second stage nymph of arach-

nids.

deutoplasm, deuteroplasm n. [Gr. *deuteros*, second; *plasma*, formed or molded] A substance other than the nucleus and cytoplasm in a cell, esp. yolk in an egg cell; metaplasm. see **energid**.

deutoscolex see **pseudoscolex proscoplex**

deutosternum see **subcapitular gutter**

deutovum n. [Gr. *deuteros*, second; L. *ovum*, egg] (ARTHRO: Chelicerata) *a*. The resting, incompletely developed stage following the shedding of the chorion of the egg of mites and spiders. *b*. A prelarva. *c*. The second egg.

development n. [F. *developper*, to unfold] The progressive production of the phenotypic characteristics of an organism.

developmental cycle (ARTHRO: Insecta) The period between the laying of an egg and eclosion of the adult from the pupal case.

developmental homeostasis The ability to produce a normal phenotype in spite of developmental or environmental disturbances.

deviate n. [L. *de*, away from; *via*, way] Any animal which differs from corresponding developmental stages of others of the same species.

devolution n. [L. *de*, away from; *evolvere*, to unroll] Retrograde development; degeneration.

De Vriesianism Hypothesis that evolution in general, and speciation in particular, are the results of drastic mutation. see **saltation**.

dexiotorma n.; pl. **-mae** [Gr. *dexios*, on the right; *torma*, socket] (ARTHRO: Insecta) 1. A small sclerotic ring of scarabaeoid larvae, extending inward from the epipharynx, occasionally bearing a heel-shaped pternotorma. 2. The right torma.

dexiotropic a. [Gr. *dexios*, on the right; *trope*, turn] A right turning spiral, as in shells.

dextral a. [L. *dexter*, right] Right-handed; to the right of the median line.

dextral gastropods (MOLL) A gastropod with genitalia on the right side of the head-foot mass or pallial cavity; commonly the shell, when viewed with the apex uppermost, has the aperture on the right. see **sinistral gastropods**.

dextron a. [L. *dexter*, right] Pertaining to the right side of the body.

dextrorse a. [L. *dexter*, right; *vertere*, to twist] An organism spirally twisting to the right. see **sinistrorse**.

diacresis see **diaeresis**

diactinal a. [Gr. *dis*, twice; *aktis*, ray] Being pointed at both ends.

diactinal monaxon (PORIF) A monaxon that develops by growing in both directions, while originating from a central point; diactine; rhabdus.

diactine see **diactinal monaxon**

diaene n. [Gr. *dis*, twice; *triaina*, trident] (PORIF) A form of triaene produced by loss of one ray from the cladome.

diaeresis n. [Gr. *diairein*, to divide] (ARTHRO: Crustacea) A transverse groove on the posterior part of an exopod (rarely endopod) of a uropod appendage; occasionally dividing the exopod into two movable parts.

diagenodont teeth (MOLL: Bivalvia) Having differentiated cardinal teeth (up to 3) and lateral teeth (up to 2) on the hinge plate.

diagnosis n.; pl. **-noses** [Gr. *diagignoskein*, to distinguish] A formal statement of the characters distinguishing one taxon from closely related taxa.

diagnostic a. [Gr. *diagignoskein*, to distinguish] Uniquely characterizing a taxon.

diagonal ridge (MOLL: Bivalvia) A ridge running diagonally from the umbo toward the posteriolateral margin of the valve.

diakinesis n. [Gr. *dia*, through; *kinesis*, movement] The final stage of prophase in the first meiotic division; paired, contracted chromosomes with the disappearance of nucleolus and nuclear envelope.

- dialyneury** n. [Gr. *dialyein*, to reconcile; neuron, nerve] (MOLL: Gastropoda) Having zygoneural connections on both left and right sides.
- dialysis** n.; pl. **dialyses** [Gr. *dia*, through; *lyein*, to loose] Separation of dissolved crystalloids and colloids through a suitable membrane.
- dialyzate, dialysate** n. [Gr. *dia*, through; *lyein*, to loose] Used for both the material that will and will not diffuse through a membrane.
- diamorph** n. [Gr. *dia*, through; *morphe*, form] (PORIF) A cell mass of spherical form and a continuous pinacoderm formed as a result of aggregation of dissociated cells.
- diapause** n. [Gr. *dia*, through; *pausis*, a stopping] A quiescent phase during the development of an organism in which most physiological processes are suspended; maybe optional, obligatory or internally controlled. see **amphodynamous**.
- diaphanous** a. [Gr. *dia*, through; *phanos*, light] Showing light through its substance; transparent; translucent; clear.
- diaphragm** n. [Gr. *diaphragma*, partition, wall] 1. Any of the horizontal dividing membranes of a body cavity. 2. A structure controlling admission of light through an aperture. 3. (ARTHRO: Insecta) *a.* In Heteroptera, separating the general body cavity from the genital chamber. *b.* In Lepidoptera, that which closes the body cavity caudally, comprised of dorsally the fultura superior and ventrally the fultura inferior. 4. (BRYO) *a.* In Stenolaemata, the membranous or skeletal partition which extends transversly across the entire zooidal chamber. *b.* In Gymnolaemata autozooids, the muscular ring of the body wall. 5. (CNID: Hydrozoa) A delicate chitinous floor that supports the hydranth. 6. (ECHI) A thin-walled, funnel-like septum incompletely separating an anterior or peripharyngeal coelom from the general body cavity.
- diapolar cells** (MESO) Ciliated somatodermal cells located between the parapolar and uropolar cells; trunk cells.
- diarhyses** n.pl. [Gr. *dis*, twice; *rhusus*, delivering] (PORIF: Hexactinellida) Radial canals that run through the skeletal

wall and have a single flagellated chamber.

- diarthrosis** n. [Gr. *dis*, twice; *arthron*, joint] An articulation that permits free movement. **diarthrodial** a.
- diarticular** a. [Gr. *dis*, twice; *articulus*, joint] Said of, or pertaining to two joints.
- diastase, diastatic** see **amylase**
- diastole** n. [Gr. diastole, difference] The regular expansion of the heart during which it fills with blood; the relaxatory phase. **diastolic** a. see **systole**.
- diastomian** a. [Gr. *dia*, through; *stoma*, mouth] (ARTHRO: Insecta) Pertaining to the orifice, (excluding ostiole), of the metathoracic scent gland of Heteroptera, consisting of a pair of relatively widely spaced openings. see **omphalian**.
- diastomatic** a. [Gr. *dia*, through; *stoma*, mouth] Through the stomata or pores.
- diathesis** n. [Gr. *dia*, through; *thesis*, position] An inherited constitutional state whereby an individual is especially vulnerable to a certain type of reaction, disease or development.
- diatom rake** (ARTHRO: Insecta) A structure of the galea of mayfly nymphs composed of bristles and pectinated spines, or of hairs or spines on the maxillae, functioning in scraping food.
- diaulic** a. [Gr. *dis*, twice; *aulos*, pipe] 1. With two separate ducts open to the surface. 2. (MOLL: Gastropoda) Male and female portions with separate gonopores. see **monaulic, triaulic**.
- di-axial** (ARTHRO: Chelicerata) Pertaining to chelicerae of spiders with the paturon projecting either forward or down with the fangs moving inward towards each other. see **paraxial**.
- diaxon** n. [Gr. *dis*, twice; *axon*, axis] Having two axes or two axis-cylinder processes.
- diblastula** n. [Gr. *dis*, twice; *blastos*, bud] (CNID) A coelenterate embryo consisting of 2 layers arranged around a central cavity.
- dibranchiate** a. [Gr. *dis*, twice; *branchia*, gills] Having two

gills.

dicentric a. [Gr. *dis*, twice; *kentron*, midpoint of a circle] Having chromosomes or chromatids with two centromeres.

dicerous, dicerus a. [Gr. *dis*, twice; *keros*, horn] Having two horns, tentacles or antennae.

dichogamy n. [Gr. *dicha*, in two; *gamos*, marriage] The production of male and female gametes at different times in an hermaphroditic organism; protogynous and protandrous hermaphrodites. **dichogamous** a. see **homogamy**.

dichopatry n. [Gr. *dicha*, in two; L. *patria*, native country] Populations geographically separated to the extent that individuals of the involved species never meet. see **parapatric speciation**.

dichoptic a. [Gr. *dicha*, in two; *ops*, sight] Having eyes separated dorsally by integument. see **holoptic**.

dichotomize v.t. & i. [Gr. *dicha*, in two; *temnein*, to cut] To cut into two parts; to divide into pairs.

dichotomous a. [Gr. *dicha*, in two; *temnein*, to cut] Divided or dividing into two parts; successive bifurcation; two-forked. **dichotomy** n.

dichotriaene n. [Gr. *dicha*, in two; *triaina*, trident] (PORIF) A tetractinal megasclere with forked clads.

dichroism n. [Gr. *dis*, twice; *chros*, color] The property of showing two very different colors, one by transmitted light and the other by reflected light, or as some dyes staining different tissues different colors.

dichromatic a. [Gr. *dis*, twice; *chroma*, color] 1. Having two color varieties. 2. Seeing only two colors.

dichthadiform ergatogyne (ARTHRO: Insecta) In army ants, an individual of an aberrant reproductive caste, characterized by a wingless alitrunk, large gaster, and expanded postpetiole.

dichthadiigyne n. [Gr. *dichthadidos*, double; *gyne*, female] (ARTHRO: Insecta) A permanently wingless ant with greatly reduced eyes, massive pedicel, abdomen and ovaries, and strong legs.

dicondylic a. [Gr. *dis*, twice; *kondylos*, knuckle] Pertaining to

an articulation with two condyles; bicondylar.

dicostalia see **secundibracts**

dicranoclone n. [Gr. *dikranon*, pitchfork; *klon*, twig] (PORIF) A megasclere spicule having a desma with swollen terminal couplings.

dictyonal framework (PORIF) Spicules fused together into a rigid framework.

dictyonine n.; pl. **dictyonalia** [Gr. *diktyon*, net] (PORIF: Hexactinellida) Rays of regular hexactines fused at their tips to form a more or less regular three dimensional network.

dictyosome n. [Gr. *diktyon*, net; *soma*, body] The flattened set of membranes resembling a stack of plates found in a Golgi body.

dicyclic a. [Gr. *dis*, twice; *kyklos*, circle] (ECHINOD: Crinoidea) Calyx plates of primitive stalked crinoids that have an additional five infrabasal plates on the aboral side of the basal series found in the monocyclic condition; further plates may be present.

didactyl a. [Gr. *dis*, twice; *daktylos*, finger] Having two tarsi of equal length. **didactyl** n.; **didactylism** n.; **didactylous** a.

didelphic a. [Gr. *dis*, twice; *delphys*, womb] Having two uteri. see **amphidelphic**.

diductor muscles (BRACHIO) Two pairs of muscles that open valves of articulates, commonly attached to brachial valve immediately anterior to beak; principal pair usually inserted in pedicle valve on either side of adductor muscles with posterior accessory pair.

didymous a. [Gr. *didymos*, double] Formed in pairs; twin; double.

diecdysis n. [Gr. *dia*, through; *ekdysis*, escape from molt] Condition in which ecdysial processes are going on continuously and one ecdysis cycle passes rapidly into another.

diecious see **dioecious**

diel a. [L. *dies*, day] Occurring in a 24 hour period.

dietella n.; pl. **-ae** (BRYO) Large laterobasal pore chamber that functions in interzooidal communication. see **pore cham-**

bers.

- differentia** n.; pl. **-tiae** [L. *differentia*, difference] The specific difference of one species from other species of the same genus.
- differential diagnosis** A statement of characters distinguishing a given taxon from other specifically mentioned equivalent taxa. see **delimitation**.
- diffRACTed** a. [L. *dis*, twice; *frangere*, to break] 1. Bent in different directions. 2. Separated into parts.
- diffusate** n. [L. *diffusus*, spread out] Material that diffuses through a semi-permeable membrane; dialyzate.
- diffuse** a. [L. *diffusus*, spread out] 1. Not sharply distinct at the edge or margin. 2. Widely spread; extended. 3. (MOLL: Gastropoda) The aperture when spread out or widened.
- diffusion** n. [L. *diffusus*, spread out] The spreading of a dissolved substance through solvent by virtue of the random movements of its molecules or ions.
- diffusion tracheae** (ARTHRO: Insecta) Cylindrical tracheae not subject to collapse. see **ventilation tracheae**.
- digametic** see **heterogametic**
- digeneSis** n. [Gr. *dis*, twice; *genesis*, beginning] Alternation of generations.
- digeneTic** a. [Gr. *dis*, twice; *genesis*, beginning] With sexual reproduction in the mature forms and asexual reproduction in larval stages.
- digenoporous** a. [Gr. *dis*, twice; *genos*, birth; *poros*, passages] Having two genital pores.
- digestion** n. [L. *digestus*, render food assimilable] The process by which nutrient materials are rendered soluble and absorbable for incorporation into the metabolism.
- digit** n. [L. *digitus*, finger] A finger or finger-like structure; a toe.
- digital** a. [L. *digitus*, finger] Digit-like.
- digitated** a. [L. *digitus*, finger] Fingered or clawed; divided into finger-like processes.
- digitate processes** (SIPUN) Finger-like processes or leaf-like

projections originating at the dorsal surface of the brain.

- digitation** n. [L. *digitus*, finger] (MOLL: Gastropoda) The finger-like, outward projection from the outer lip of the shell.
- digitelli** n.pl. [L. dim. *digitus*, finger] (CNID: Scyphozoa) Tentacle-like gastric filaments on the inner edge of each septum.
- digitiform** a. [L. *digitus*, finger; *forma*, shape] Shaped like, or functioning like a finger.
- digitules** n. [L. *digitulus*, little finger] (ARTHRO: Insecta) Appendages in the form of dilated or knobbed hairs on the feet of scale insects. see **empodium**.
- digitus** n.; pl. **-ti** [L. *digitus*, finger] 1. A digit. 2. (ARTHRO: Insecta) *a.* The dactylus. *b.* In Hymenoptera genitalia, a curved or hooked, strongly muscled process projecting from the vosellar plate, movably opposed to the cuspis.
- diglyphic** a. [Gr. *dis*, twice; *glyphein*, to engrave] (CNID: Anthozoa) In sea anemones, having two siphonoglyphs: one siphonoglyph= sulcus; two siphonoglyphs= sulculus.
- dignathan** a. [Gr. *dis*, twice; *gnathion*, jaw] (ARTHRO) Having mandibles and one pair of maxillae, such as Pauropoda and Diplopoda. see **trignathan**.
- digoneutic** a. [Gr. *dis*, twice; *goneuein*, to produce] Having two broods in one year. **digoneutism** n.
- digonic** a. [Gr. *dis*, twice; *gone*, seed] Sperm and ova are produced in separate gonads of the same individual. see **syngonic**, **amphigonic**.
- dikont** a. [Gr. *dis*, twice; *kontos*, punting pole] Biflagellate.
- dilacerate** v.t.; -ated [L. *dis*, apart; *lacera*, torn] To tear to pieces; tear apart.
- dilatated** a. [L. *dilatus*, spread] Having a wide margin; flattened; expanded; widened.
- dilate** v.t. [L. *dilatus*, spread] To expand or distend.
- dilator** n. [L. *dilatus*, spread] A muscle that functions to dilate.
- dilator valve** (NEMATA) Ventrolateral hypodermal muscles that function to open the vulva. see **constrictor valve**.
- dilute** a. [L. *dilutus*, mixed] Being diluted; thin; weak.

- dimeric** a. [Gr. *dis*, twice; *meros*, part] 1. Having two parts. 2. Bilaterally symmetrical.
- dimerous** a. [Gr. *dis*, twice; *meros*, part] 1. Composed of two parts. 2. Having two tarsal segments.
- dimidiate** a. [L. *dimidius*, half] 1. Divided into two equal parts. 2. Only one-half the normal development. 3. (ARTHRO: Insecta) Having an elytra that covers only half the abdomen.
- dimorph** n. [Gr. *dis*, twice; *morphe*, form] An individual displaying dimorphism.
- dimorphism** n. [Gr. *dis*, twice; *morphe*, form] A morphological difference in form, color, size or sex in a single population.
- dimorphic** a. see **sexual dimorphism, polymorphism**.
- Dimyaria** n.pl. [Gr. *dis*, twice; *mys*, muscle] (MOLL: Bivalvia) Taxon sometimes used to include those bivalve mollusks whose shells are closed by two adductor muscles; **dimyarian, dimyric** a.; **dimyarian** a. & n.
- dinergate** n. [Gr. *deinos*, terrible; *ergates*, worker] (ARTHRO: Insecta) A soldier ant, characterized by a huge head and mandibles (for defense) and a thoracic structure sometimes the size of the female, or in the development of its sclerites.
- dinergatogyne** n. [Gr. *deinos*, terrible; *ergates*, worker; *gyne*, woman] (ARTHRO: Insecta) A mosaic form in ants, combining the characteristics of a dinergate and a ergatogyne.
- dinergatogynomorph** n. [Gr. *deinos*, terrible; *gyne*, woman; *morphe*, form] (ARTHRO: Insecta) In ants, any individual in which female characteristics alternate with worker and soldier.
- dinophthisergate** n. [Gr. *deinos*, terrible; *phthisis*, decline; *ergates*, worker] (ARTHRO: Insecta) In ants, a soldier-worker pupal mosaic that fails to progress to the adult stage due to parasitism or other interference.
- dioecious** a. [Gr. *dis*, twice; *oikos*, house] Separate sexes; males and females being different individuals; gonochoristic; unisexual; opposed to monoecious.
- dioptate** a. [Gr. *dis*, twice; *ops*, eye] Having eyes or ocelli divided by a septum or line.

- dioptic** a. [Gr. *dis*, twice; *ops*, eye] Refractive; vision by refraction of light.
- diorchic** a. [Gr. *dis*, twice; *orchis*, testicle] Having two testes. see **monorchic**.
- diphagous parasitoid** (ARTHRO: Insecta) In Hymenoptera, a species in Adelinidae in which the male (parasitoid) and female inhabit the same host species, but both feed differently. see **heterotrophic parasitoid, heteronomous hyperparasitoid**.
- diphygenetic** a. [Gr. *diphyes*, twofold; *genesis*, beginning] Producing two different types of embryos.
- diphyletic** a. [Gr. *dis*, two; *phyle*, race) Pertaining to animals which are derived from two ancestral lines.
- dipleurula** n. [Gr. *dis*, twice, dim. *pleuron*, side] (ECHINOD) Collective term applied to planktonic bilaterally symmetrical, ciliated larvae; echinopaedium. see **auricularia, doliolaria, pluteus, bipinnaria larva**.
- diplobiont** n. [Gr. *diploos*, twofold; *bionai*, to live] An organism with two morphologically distinct haploid and diploid generations. see **haplobiont**.
- diploblastic** a. [Gr. *diploos*, twofold; *blastos*, bud] Having two embryonic germ layers, ectoderm and endoderm.
- diplocotylea cercaria** (PLATY: Trematoda) An amphistome cercaria with a pigmented anterior end. see **pigmenta cercaria**.
- diploidal** a. [Gr. *diploos*, twofold; *hodos*, way] (PORIF) Leuconoid sponges with narrow canals leading into and out of the flagellated chambers. see **aphodus, prosodus**.
- diploergate** n. [Gr. *diploos*, twofold; *ergates*, worker] (ARTHRO: Insecta) A mosaic ant showing characteristics of both major and media workers.
- diplogangliate** a. [Gr. *diploos*, twofold; *ganglion*, ganglion] With paired ganglia.
- diploid** a. [Gr. *diploos*, twofold] Having dual (2n) chromosomes, the normal number of cells in all but the mature germ cells in any individual derived from a fertilized egg. see **duplex, haploid, polyploid, chromosome**.

diplokaryon n. [Gr. *diploos*, twofold; *karyon*, nut] The nucleus of the zygote containing two diploid genomes. see **amphikaryon**.

diplonema a. [Gr. *diploos*, twofold; *nema*, thread] When chromosome tetrads begin separation, resulting in chiasmata at the points of cross over; sometimes used to denote diplotene stage.

diploneurial a. [Gr. *diploos*, twofold; *neuron*, nerve] Having a double nerve supply.

diplont n. [Gr. *diploos*, twofold; *on*, being] An organism with diploid somatic cells and haploid gametes. see **haplont**.

diplophase n. [Gr. *diploos*, twofold; *phasis*, state] Diploid phase in the life cycle of an animal (fertilization to meiosis); diplotene stage in the prophase of meiosis; zygo-phase. see **haplophase**.

Diplopoda, diplopod n. [Gr. *diploos*, twofold; *pous*, foot] A class of arthropods, commonly called millipedes, having the body somites fused into diplosegments, each with two pairs of legs.

diplosegment n. [Gr. *diploos*, twofold; L. *segmentum*, piece] (ARTHRO: Diplopoda) Fusion of two body segments resulting in a segment with two pairs of legs each; a diplosomite.

diplosome n. [Gr. *diploos*, twofold; *soma*, body] A double centrosome; paired centrioles.

diplosomite n. [Gr. *diploos*, twofold; *soma*, body] (ARTHRO: Diplopoda) A diplosegment. see **prozonite, metazonite**.

diplostenoecious a. [Gr. *diploos*, twofold; *stenos*, narrow; *oikos*, house] Pertains to the phenomena of certain species occurring in two contrasting habitats.

diplostichous a. [Gr. *diploos*, twofold; *stichos*, line] 1. Arranged in two rows or series. 2. (NEMATA: Adenophorea) In Mermithida, the stichosome.

diplostomulum n. [Gr. *diploos*, twofold; L. dim. *stoma*, mouth] (PLATY: Trematoda) Strigeoid metacercaria in the family Diplostomatidae.

diplotene a. [Gr. *diploos*, twofold; *tainia*, ribbon] The fourth stage of meiotic prophase one when paired chromatids be-

gin to separate. see **diplonema**.

diplozoic a. [Gr. *diploos*, twofold; *zoon*, animal] Bilaterally symmetrical.

dipneumonous a. [Gr. *dis*, twice; *pneumon*, lung] Having two lungs.

diporpa n. [Gr. *dis*, twice; *porpe*, buckle] (PLATY: Trematoda) A larval stage in the life cycle of the monogean Diplozoon that permanently unites with another.

dipterocecidium n. [Gr. *dis*, twice; *pteron*, wing; dim. *kekis*, gall] (ARTHRO: Insecta) A gall formed by any dipterous insect.

dipterous a. [Gr. *dis*, twice; *pteron*, wing] (ARTHRO: Insecta) Belonging to the insect order Diptera.

direct eyes (ARTHRO: Chelicerata) The anterior median pair of eyes in spiders.

directive mesenteries (CNID: Anthozoa) In Zoantharia, the dorsal and ventral pairs of specialized mesenteries attached to the siphonoglyph.

directive rib (MOLL: Bivalvia) A rib on the shell surface lying in a single plane.

directive spiral (MOLL: Bivalvia) A directive rib that is spiral in a single plane.

direct metamorphosis see **incomplete metamorphosis**

direct wing muscles (ARTHRO: Insecta) The axillary and dorsal muscles of a wing.

disaccharides n.pl. [L. *dis*, twice; *saccharum*, sugar] A carbohydrate which can be hydrolyzed into two monosaccharides.

disc, disk n. [L. *discus*, circular plate] 1. Any flattened part in the form of a disc. 2. Circumoral area of many animals. 3. (ARTHRO: Insecta) In Coleoptera, the general dorsal surface of the elytra, usually marked by longitudinal striae corresponding to a row of sclerotized pillars connecting the upper and lower faces of the elytra. 4. (ECHINOD: Asteroidea) The central part of the body. 5. (MOLL: Bivalvia) The whole valve exclusive of the auricles in Pectinacea. **discal** a.

discal area (ARTHRO: Insecta) In wings, the central area or

area covered by the discal cell.

discal bristle (ARTHRO: Insecta) In Diptera, one or more pairs of bristles in the mid-dorsal wall of the abdominal segment.

discal cell (ARTHRO: Insecta) A cell in the basal or central part of the wings.

discal cross vein (ARTHRO: Insecta) A cross vein behind the discal cell in a wing.

discal elevation (ARTHRO: Insecta) In Hemiptera, the central area of the anterior wing raised above the surrounding level.

discal patch (ARTHRO: Insecta) In male hesperoid butterflies, conspicuous patches, tufts, or brushes of modified scales, sometimes contained in eversible folds of the anterior wing.

discal scutellar bristles see **dorsoscutellar bristles**

discal seta (ARTHRO: Insecta) Large seta on the dorsal surface of the operculum.

discal vein (ARTHRO: Insecta) In Lepidoptera, a crossvein closing the discal or median cell of the wing.

disciform a. [L. *discus*, circular plate; *forma*, shape] Having the shape of a plate or disc; discoid.

discinid n. [L. *discus*, circular plate] (BRACHIO: Inarticulata) A planktonic bivalve larva with round valves, and five pairs of major setae, the fourth of which is larger than the others.

discleritous a. [L. *dis*, twice; Gr. *skleros*, hard] (ARTHRO) Pertaining to tergites and sternites being distinct and separate. see **synscleritous**.

discocellular vein (ARTHRO: Insecta) The discal vein.

discoctasters n.pl. [Gr. *diskos*, circular plate; *okto*, eight; *aster*, star] (PORIF) Spicules containing 8 rays terminating in disks; discoctasters.

discodactylous a. [Gr. *diskos*, circular plate; *daktylos*, finger] Having a sucker at the end of a digit.

discohexaster n. [Gr. *diskos*, circular plate; *hex*, six; *aster*, star] (PORIF) A spicule with 6 rays meeting at right angles and terminating in discs; the individual rays may be branched.

discoid a. [Gr. *diskos*, circular plate; *eidos*, form] 1. Flat and circular; disc-like; disciform; discous. 2. (MOLL) Certain univalve shells with whorls coiled in one plane.

discoidal a. [Gr. *diskos*, circular plate; *eidos*, form] 1. Approaching a disc in form. 2. (MOLL: Gastropoda) Convolute or involute and more or less flattened, as the spire of a shell.

discoidal area 1. The middle area of an organ. 2. (ARTHRO: Insecta) The middle of a wing; discoidal field.

discoidal areolets see **discal cells**

discoidal cell (ARTHRO: Insecta) 1. An outstanding cell of a wing. 2. In Odonata, the quadrilateral. 3. In Diptera, the median cell.

discoidal crossvein see **discal cross vein**

discoidal field see **discoidal area**

discoidal triangle see **triangle**

discoidal vein (ARTHRO: Insecta) 1. In Hymenoptera, the vein forming a continuation of the median vein beyond the end of the transverse median vein, and extending along the posterior margin of the first discoidal cell. 2. In Orthoptera, the first and largest branch of the humeral vein. 3. In Diptera, the media 2. 4. The anterior intercalary vein.

discolor, discolour n. [L. *discolor*, of different colors] Change of color; more than one color.

discontinued varices (MOLL: Gastropoda) Varices of shell formation when revolution is not in a straight line with those of the next.

discontinuous variation Phenotypic variation in an animal population in which the characters do not grade into each other; qualitative inheritance. see **continuous variation**.

discoctasters see **discoctasters**

discordant margins (MOLL: Bivalvia) Valve margins not matching, but overlapping one another.

discorhabd n. [Gr. *diskos*, circular plate; *rhabdos*, rod] (PORIF) A linear spicule with disc-like outgrowths arising from a straight axis.

- discota** n. [Gr. *diskos*, circular plate] (ARTHRO: Insecta) Adult development from imaginal discs in the embryo. see **adiscota**.
- discotriaene** n. [Gr. *diskos*, circular plate; *triaina*, trident] (PORIF) A tetractinal spicule with three rays flattened flush in one plane with a short pointed fourth axis.
- discrepant** a. [L. *discrepantia*, discordancy] Discordant; disagreeing; different.
- discrete** a. [L. *discretus*, separated] Well separated; applied to distinct parts.
- discrimen** n. [L. *discrimen*, division] (ARTHRO: Insecta) A median longitudinal sulcus with an internal ridge running along the middle of the sternum.
- discus** n. [L. *discus*, circular plate] A flat circular structure, part or area.
- disease** n. [L. *dis*, without; F. *aise*, comfort] An alteration of function or structure of a tissue or organ or of an organism; sickness; malady; impaired health.
- disjugal furrow** (ARTHRO: Chelicerata) Pertaining to the furrow separating the prosoma and opisthosoma of mites.
- disjunct** a. [L. *disjunctus*, disunited] 1. Pertaining to separation of parts or formed into groups. 2. (ARTHRO: Insecta) Having the head, thorax and abdomen set off by constrictions. 3. (MOLL: Gastropoda) Whorls of a shell not touching each other.
- disjunction** n. [L. *disjunctus*, disunited] Separation of daughter chromosomes during anaphase of mitosis and meiotic division.
- disjunct pallial line** (MOLL: Bivalvia) A pallial line broken up into unequal muscle attachments.
- disk** see **disc**
- dislocate** v.t. [L. *dis*, without; *locus*, place] To move out of its proper place, as when stria bands or lines are in discontinuity.
- disomic** a. [Gr. *dis*, twice; *soma*, body] Cells or individuals in the 2n condition; cells in the n+1 condition.

- dispersal** n. [L. *dispergere*, to disperse] 1. The act or result of scattering. 2. The scattering or distribution of organisms in the biosphere.
- displacement** n. [OF. *desplacier*, to displace] An abnormal position of any part due to shifting from its normal position.
- disposed** a. [L. *dis*, away from; *ponere*, to place] Distributing, arranged or laid out.
- dissect** v. [L. *dissecare*, to cut open] 1. To divide or separate into parts; to cut into pieces for examination. 2. To analyze, to examine.
- disseminule** n. [L. *dis*, away from; *seminare*, to sow] One who originates colonization.
- dissepiment(s)** n.; n.pl. [L. *dissaepire*, to separate] 1. A partitioning wall; a septum. 2. (ARTHRO: Insecta) *a*. The septa of an embryo, separating the coelom-sacs. *b*. The enclosing membrane of an obtect pupa. 3. (CNID: Anthozoa) A transverse calcareous plate or partition between the radiating septa of coral. 4. (SIPUN) A series of peritoneal tissue situated transversely across the coelom.
- dissilient** a. [L. *dissilire*, to burst asunder] Bursting or springing open.
- dissimilation** see **catabolism**
- dissoconch** n. [Gr. *dissos*, double; *konche*, shell] (MOLL) The shell of a second stage larva.
- dissogeny, dissogony** n. [Gr. *dissos*, double; *genos*, descent] (CTENO) A form of reproduction in an animal of sexual maturity in the larval stage and again as an adult.
- distacalypteron** see **antisquama**
- distad** adv. [L. *distare*, to stand apart] Away from the body, or from point of attachment; toward the end farthest from the body.
- distadentes** n.pl. [L. *distare*, to stand apart; *dentis*, tooth] The dentes distad on the mandible.
- distal** a. [L. *distare*, to stand apart] Pertaining to any part of a structure farthest from midline of the body or base of attachment; opposed to proximal.

distal bud (BRYO: Gymnolaemata) The bud arising from the distal side of the vertical wall of the parent zoid. see **basal bud**.

distal cell (ARTHRO: Insecta) The cell bounded by the branches of the crossveins in a wing.

distalia n.pl. [L. *distare*, to stand apart] (ARTHRO: Insecta) The segments of an antenna excluding the scape and pedicel.

distal process The peripheral process of a sensory nerve cell.

distal tubes see **marginal tubes**

distich n. [Gr. *distichos*, of two rows] 1. Two vertical rows; two ranked. 2. (NEMATA: Adenophorea) In Mermithida, the stichosome esophagus with a row of gland cells on either side of the esophagus and external to it; **diplostichous**. **distichous** a. see **monostich**, **stichosome**.

distichous antennae (ARTHRO: Insecta) Pectinate antennae with processes issuing from each joint and bending forward at acute angles.

distiproboscis n. [L. *distare*, to stand apart; *proboscis*, trunk] The enlarged distal portion of a proboscis.

dististipes n. [L. *distare*, to stand apart; *stipes*, stock] (ARTHRO) The distal part of the maxillary stipes.

dististylus n.; pl. -li [L. *distare*, to stand apart; Gr. *stylos*, pillar] (ARTHRO: Insecta) In Culicidae, the distal segment of the gonopods; clasp filament.

distome n. [Gr. *dis*, double; *stoma*, mouth] (PLATY: Trematoda) A fluke with an oral and ventral sucker.

distribution n. [L. *distributus*, allot, divide] Range of an organism or group of organisms in space and time.

ditaxic foot (MOLL: Gastropoda) Foot of Pomatiasidae, divided by a transverse sulcus (groove-furrow) at about its anterior third.

Dithra see **Bivalvia**

ditrochous a. [Gr. *dis*, twice; *trochis*, runner] (ARTHRO: Insecta) Pertaining to Hymenoptera having a two-segmented trochanter.

diuresis a. [Gr. *dia*, through; *ouron*, urine] Pertaining to urine

excretion in excess of the usual amount, directly referable to drinking, eating or certain metabolites.

diurnal a. [L. *diurnus*, of the day] Pertaining to animals active only during the daytime. see **nocturnal**, **crepuscular**.

diurnal eyes (ARTHRO: Chelicerata) In spiders, eyes that are dark in color.

diurnal rhythm Having a 24 hour periodic cycle. see **circadian**.

divaricate a. [L. *divaricatus*, spread apart] 1. Forked or divided into branches; diverging. 2. (MOLL: Bivalvia) Pertains to ornamentation consisting of widely divergent costulae or other shell ornamentation.

divaricator n. [L. *divaricatus*, spread apart] 1. A muscle which causes parts to open. 2. (BRACHIO) A muscle from the ventral valve to the cardinal process which opens the shell. 3. (BRYO) One of a pair of muscles which open the mandible for an avicularium or an operculum.

divergent a. [L. *diversus*, different] Becoming more separated distally; extending in different directions from the same origin.

divergent adaptation Adaptation to different kinds of environmental influence that results in a change from a common ancestral form.

diverse a. [L. *diversus*, different] Being distinct; differing in size or shape; dissimilar; separate.

diverticulum n.; pl. -ula [L. *devertere*, to turn away] An outgrowth or pouch of some sort from the main axis of an organ.

divided a. [L. *dividere*, to separate] Parted or disunited.

divided eyes (ARTHRO: Insecta) 1. One in which the ommatidia in one area are different in size and often in pigmentation. 2. In many Odonata, the dorsal facets are nearly twice the diameter of the ventral ones. 3. In certain Hemiptera, the ventral facets are larger. 4. In some coleopteran water beetles, the eye is divided transversely. 5. In certain Ephemeroptera, the lateral pair are apposition eyes and the dorsal pair are superposition eyes.

dixenic a. [Gr. *dis*, two; *xenos*, guest] Rearing of one or more individuals of a single species in association with two known species of organisms. see **axenic**, **monoxenic**, **polyxenic**, **synxenic**, **trixenic**, **xenic**.

dixenous a. [Gr. *dis*, two; *xenos*, guest] Parasitizing two host species. see **monoxenous**.

DNA Deoxyribonucleic acid

docoglossate a. [Gr. *dokos*, main beam; *glossa*, tongue] (MOLL: Gastropoda) Pertaining to the long radula containing a few strong teeth (up to 12) per transverse row; median radular tooth may be lacking or fused with lateral teeth to form a strong median tooth; marginal and lateral teeth, when present, are uncinete.

dolabriform a. [L. *dolabra*, ax; *forma*, shape] Hatchet-shaped.

dolichasters n.pl. [Gr. *dolichos*, long; *aster*, star] (ARTHRO: Insecta) In Neuroptera larvae, modified setae on the lateral segmented processes of the dentate mandibles.

dolioform, **doliiform** a. [L. *dolium*, wine-cask; *forma*, shape] Barrel-shaped; globose; capacious.

doliolaria larva (ECHINOD: Crinoidea) A free-swimming bilaterally symmetrical larva of the crinoids and a post auricularia holothurian larva; characterized by possessing a large apical tuft and several (4 or 5) ciliated bands around the body; dipluerula. see **pentacrinoid**.

Dollo's rule The principle that evolution is irreversible, i.e., structures or functions once lost cannot be regained.

dome organ A sensillum campaniformia.

dominant allele An allele that determines the phenotype of a heterozygote. see **recessive allele**.

dominant character A character from one parent that manifests itself in offspring to the exclusion of a contrasted (recessive) character from the other parent. see **recessive character**.

dormancy n. [L. *dormire*, to sleep] A period of inactivity or suspended animation usually referable to adverse environmental conditions, but can be genetically controlled.

dormant a. [L. *dormire*, to sleep] Being in a state of torpor or

sleep, hibernating, quiescent or aestivating.

dorsad adv. [L. *dorsum*, back; *ad*, to] Toward the back or top.

dorsal a. [L. *dorsum*, back] 1. Pertaining to the upper surface or back of the body. 2. (ARTHRO: Crustacea) In Ostracods in normal position, the upper part comprising the area that contains hinge, eyes, antennules, antennae and stomach. 3. (BRACHIO) From the pedicle valve toward the brachial valve. 4. (ECHINOD) see **aboral**. 5. (MOLL) *a*. In Bivalvia, the back edge in the region of the hinge. *b*. In Gastropoda, the back remote from the aperture; the conical top surface of a limpet. 6. (POGON) see **adneurial**.

dorsal area 1. (G.T.) 2. (ARTHRO: Crustacea) In Ostracoda, that part of the valve surface adjacent to the dorsal border, comprised of anterodorsal, mid-dorsal and posterodorsal areas. 2. (MOLL) For chitins, see **jugal area**.

dorsal arms of the tentorium (ARTHRO: Insecta) A pair of dorsal arms arising from the anterior arms; may be attached to the dorsal wall of the head by short muscles.

dorsal blastoderm see **serosa**

dorsal blood vessel 1. (ARTHRO: Insecta) The posterior heart and anterior aorta. 2. (ECHI) A dorsal tubular blood vessel in the anterior part of the body cavity often associated with the foregut; functioning in the transport of blood anteriorly to the median vessel of the proboscis; sometimes called the heart.

dorsal bristles see **dorsocentral bristles**

dorsal cardo (ARTHRO: Crustacea) In Ostracoda, that portion of the peniferum that serves as a hinge by which it articulates with the zygum.

dorsal denticle 1. (G.T.) 2. (ARTHRO: Crustacea) In Ostracoda, a small, solid spinose projection on the dorsal margin; smaller than the dorsal spine.

dorsal diaphragm (ARTHRO: Insecta) Muscular sheets of tissue extending from the ventral wall of the heart and vessels to the laterodorsal parts of the body wall, usually incomplete laterally; it may or may not delineate the pericardial sinus from the perivisceral sinus.

dorsal foramen (BRACHIO) A posterior perforation of the cardinal plate that may or may not encroach on the beak of the brachial valve.

dorsal gland orifice 1. The opening of any dorsal gland. 2. (ARTHRO: Insecta) In Diaspididae, disc pores and ducts for wax production on the surface of the pygidium.

dorsal hair tuft see **dorsal tuft**

dorsalia n.pl. [L. *dorsum*, back] (GNATHO) Paired sensory bristles found dorsally on the head.

dorsal lip 1. (G.T.) 2. (ARTHRO: Insecta) In Coccoidea, a chitinized plate supporting the anal tube.

dorsal margin/border 1. (G.T.) 2. (ARTHRO: Crustacea) In Ostracoda, part of the valve outline, above or at the hinge line.

dorsal ocelli (ARTHRO: Insecta) Simple eyes of adults, that vary in number from 2 to 3 in different orders.

dorsal organ 1. (ANN: Polychaeta) In Orbiniida and Spionida, ciliated sensory tubercles, ridges, or bands located on the dorsal surface of the segments. see **lateral organs**. 2. (ARTHRO: Crustacea) Thickened glandular area of hypoderm on the dorsal surface in the posterior or anterior part of the cephalon. 3. (ARTHRO: Insecta) A distinct mass of cells in the dorsal part of an embryo.

dorsal ostioles (ARTHRO: Insecta) In Pseudococcidae, the dorsal transverse, slit-like openings on the pronotum and the sixth abdominal segment.

dorsal plate 1. (ARTHRO: Chelicerata) In Mesostigmata, the dorsal plate on the body. 2. (ARTHRO: Crustacea) In Decapoda, a spindle-shaped division of the carapace. 3. (ARTHRO: Insecta) *a.* In Buprestidae *larva*, the plate or disk on the dorsal surface of the enlarged segment back of the head. *b.* In some Diaspididae, slightly to elaborately branched marginal pygidial processes with none to many microducts.

dorsal pores (ARTHRO: Insecta) In Coccoidea, the outlet of wax glands; the ceratubae.

dorsal scale 1. (G.T.) 2. (ARTHRO: Insecta) *a.* The wax and

exuviae cover resting tentlike over the body of armored scale. *b.* Usually two peglike cibarial setae borne lateral and/or posterior to the anterior hard palate of the clypeopalatum of mosquitoes.

dorsal setae 1. (G.T.) 2. (ARTHRO: Insecta) Usually two peglike cibarial setae borne lateral and/or posterior to the anterior hard palate of the clypeopalatum of mosquitoes.

dorsal shield (ECHINOD: Asterozoa) In Ophiurida, the ossicles along the mid-line of the aboral arm surface; dorsal arm plate.

dorsal sinus 1. (G.T.) 2. (ARTHRO: Insecta) The blood space enclosed by the dorsal diaphragm and the heart; dorsal pericardial sinus; pericardial cavity.

dorsal spine 1. (G.T.) 2. (ARTHRO: Crustacea) In Ostracoda, sometimes prominent, solid or hollow, pointed projection on the dorsal valve margin.

dorsal spur 1. (G.T.) 2. (ARTHRO: Insecta) In Syrphidae larvae, a pointed spine or ridge-like elevation of the posterior spiracular plate mesad to the circular plate.

dorsal star (ECHINOD: Crinoidea) In some Comatulida, a stellate hollow around the aboral pole of the centrodorsal ossicle.

dorsal stylet (ARTHRO: Insecta) In Anoplura, one of two stylets that are retracted within the trophic pouch.

dorsal tentorial arm (ARTHRO: Insecta) Thought to be an outgrowth of the anterior arm, which it joins near the junction of the anterior and posterior arm; frequently reduced or more or less consolidated in Diptera.

dorsal tubercles see **submarginal tubercles**

dorsal tubular spinnerets see **dorsal pores**

dorsal tuft (ARTHRO: Insecta) In mosquito larvae, a tuft of long setae on the dorsum of the ninth segment of the abdomen.

dorsal valve see **brachial valve**

dorsal vessel 1. The dorsal blood vessel. 2. (SIPUN) see contractile vessel.

dorsiferous a. [L. *dorsum*, back; *ferre*, to carry] Carrying young or eggs upon the back.

dorsiventral see **dorsoventral**

dorso-alar region (ARTHRO: Insecta) In Diptera, that area between the transverse suture and the scutellum, and the base of the wing and the dorsocentral region.

dorsocaudad adv. [L. *dorsum*, back; *cauda*, tail] Toward the dorsal surface and caudal end of the body.

dorsocentral a. [L. *dorsum*, back; *centralis*, midpoint] 1. Pertaining to the mid-dorsal surface. 2. (ECHINOD) Pertaining to the aboral surface.

dorsocentral bristles (ARTHRO: Insecta) In Diptera, a longitudinal row of bristles on the mesonotum, laterad of the acrostichal bristles; absent in many groups.

dorsocentrals see **dorsocentral bristles**

dorso-humeral region (ARTHRO: Insecta) The humeri of Diptera.

dorsomedian a. [L. *dorsum*, back; *medius*, middle] Pertaining to the true middle line on the dorsum of an individual.

dorsomedian groove (ARTHRO: Crustacea) In certain Decapoda, a longitudinal groove extending from the tip of the rostrum to the posterior carapace margin dorsomedially.

dorsomesal a. [L. *dorsum*, back; Gr. *mesos*, middle] Being at the top and along the midline.

dorsomeson n. [L. *dorsum*, back; Gr. *mesos*, middle] Where the meson meets with the dorsal surface of the body.

dorso-pleural line (ARTHRO: Insecta) The line of separation between the dorsum and the limb bases of the body, often marked by a fold or groove.

dorsopleural suture (ARTHRO: Insecta) In Diptera, a suture separating the mesonotum from the pleuron.

dorsoscutellar bristles (ARTHRO: Insecta) In Diptera, a pair of bristles on the dorsal portion of the scutellum, one on each side of the midline.

dorsotentoria n. [L. *dorsum*, back; *tentorium*, tent] (ARTHRO: Insecta) The dorsal arms of the tentorium.

dorsoventral a. [L. *dorsum*, back; *venter*, belly] In the axis or direction from the dorsal toward the ventral surfaces; bifacial; dorsiventral.

dorsoventralis posterior (ARTHRO: Crustacea) In Decapoda, a prominent muscle connecting the head apodemes with the inner surface of the carapace posterior to the cervical groove.

dorsum n. [L. *dorsum*, back] The back or upper surface of an organism.

dorylaner n. [Gr. *dory*, spear; *aner*, male] (ARTHRO: Insecta) A large male form of the driver and legionary ants, characterized by large, modified mandibles, long cylindrical gaster and singular genitalia.

dorylophile n. [Gr. *dory*, spear; *philos*, loving] Any obligatory guest of army ants belonging to the Dorylini.

double haploid A haploid possessing a complete genome from each of two species. see **synhaploid**.

double helix Form of DNA proposed by Watson and Crick, made of two chains of nucleotides arranged spirally around each other.

double recessive A cell or organism showing the recessive phenotype.

doublure n. [F. *doublure*, lining] (ARTHRO) The reflected margin of a carapace, as in mantis shrimp, horseshoe crabs and trilobites.

Doyere's cone The final conical termination of a nerve fiber entering a muscle; an end plate.

drepanoid a. [Gr. *drepane*, sickle] Sickle-shaped; falcate; drepaniform.

drill n. [D. *drillen*, to bore, drill] (MOLL: Gastropoda) A snail that preys upon other mollusks by penetrating the shell with a drilling apparatus. see **radula**.

dromotropic a. [Gr. *dromos*, race; *tropein*, to turn] 1. Bent in a spiral. 2. An influence affecting the conductivity of a nerve fiber.

drone n. [A.S. *dran*, the male bee] (ARTHRO: Insecta) A male social bee, especially a male honeybee or bumblebee.

- D-shaped larval stage** (MOLL) A larva in the form of a D, the back of which is the long, straight hinge; protostracum.
- duct** n. [L. *ductare*, to lead] 1. The tubular outlet of a gland for external secretion. 2. Any tube that conveys fluids or other substances.
- ductule** n. [L. dim. *ductare*, to lead] A small duct, or the beginning portion of a duct.
- ductus** n. [L. *ductare*, to lead] A duct.
- ductus bursae** (ARTHRO: Insecta) A tube in female Lepidoptera connecting the ostium with the bursa copulatrix.
- ductus ejaculatorius** The median ectodermal exit tube of the male genital system.
- ductus entericus** (NEMATA) A duct between osmium and uvette in the demanian system.
- ductus obturatus** (ARTHRO: Insecta) In Siphonaptera, a primitive genital character of certain females that functions as a spermathecal duct.
- ductus uterinus** (NEMATA) A duct between the uterus and the demanian system.
- Dufour's gland** (ARTHRO: Insecta) In Hymenoptera, an abdominal gland of the sting apparatus that supposedly secretes a liquid which when applied to cell walls, forms a thin, cellophane-like, transparent, or waxy lining which may function as a chemical cue for nesting, maintaining humidity control, a defense against microbial infection and/or food source.
- dulosis** n. [Gr. *doulosis*, servitude] (ARTHRO: Insecta) Ant slavery in which a parasitic ant species raids the nests of another species to capture brood (usually pupae) to rear as enslaved nestmates.
- duodecathecal** a. [L. *duodecim*, twelve; Gr. *theke*, case] (ANN: Polychaeta) Pertaining to having 12 spermathecae, usually in 6 pairs.
- duodenum** n. [ML. *duodenum*, the first part of the small intestine] The anterior intestine.
- dupion** n. [F. *doupeon*, double] (ARTHRO: Insecta) In Lepidoptera, a double cocoon spun by two silkworms; the silk from

such cocoons.

- duplaglossa** n. [L. *duplex*, double; Gr. *glossa*, tongue] (ARTHRO: Insecta) A forked or divided glossa.
- duplex** a. [L. *duplex*, double] Pertaining to a polyploid having two dominant alleles for a given genetic locus (AAa); doubled.
- duplicate** a. [L. *duplex*, double] Double; twofold.
- duplicato-pectinate** (ARTHRO: Insecta) A bipectinate antenna with branches alternately long and short.
- duplication** n. [L. *duplex*, double] 1. A doubling; a fold. 2. (ARTHRO: Crustacea) In Ostracoda, the calcified inner lamella of a shell that extends along the free margin of the valve and is fused to the outer lamella.
- duplication muscle fibers** (BRYO) Muscle fibers that widen the anterior end of the tentacle sheath, through which the lophophore passes during protrusion and serves as fixator ligaments for protruded polypide.
- duplivincular ligament** (MOLL: Bivalvia) A ligament consisting of a series of bands attaching it to narrow grooves in the cardinal area of the valve.
- duraphagous** a. [L. *durus*, hard; Gr. *phagein*, to eat] Pertaining to animals that break shells to eat the animal inside; sclerophagus.
- dyad** n. [Gr. *dyas*, two] 1. Two chromatids that make up one chromosome in the first meiotic division. 2. A pair of cells caused by aberrant meiotic division.
- Dyar's law** The theory that various parts of the body increase in linear dimensions by a ratio that is constant for the species.
- dynamic** a. [Gr. *dynamis*, power] Producing motion or activity. see **static**.
- dysodont** a. [Gr. *dys*, bad; *odos*, tooth] (MOLL: Bivalvia) Having small, weak teeth close to the beak.
- dysphotic** a. [Gr. *dys*, bad; *phos*, light] Dim; zone between euphotic and aphotic zones in light penetration of water.
- dyssapros** n.pl. [Gr. *dys*, bad; *sapros*, putrid; *bios*, life]

(NEMATA) Microbiotrophic nematodes able to invade and obtain nourishment from healthy plants.

dystrophic a. [Gr. *dys*, bad; *trophein*, to nourish] 1. Defective nourishment. 2. A lake high in undecomposed organic matter.

Dzierzon's rule (ARTHRO: Insecta) In social Hymenoptera, sex determination in which fertilized eggs become females and unfertilized eggs become males.