

*Parasitology, Harold W. Manter Laboratory of
Armand R. Maggenti Online Dictionary of
Invertebrate Zoology*

University of Nebraska - Lincoln

Year 2005

Online Dictionary of Invertebrate
Zoology: B

Mary Ann Basinger Maggenti*

Armand R. Maggenti†

Scott Lyell Gardner‡

*University of California-Davis

†University of California, Davis

‡University of Nebraska - Lincoln, slg@unl.edu

This paper is posted at DigitalCommons@University of Nebraska - Lincoln.

<http://digitalcommons.unl.edu/onlinedictinvertzoology/17>

B

- baccate** a. [L. *bacca*, berry] Berry-like in appearance; bacciform.
- bacillary** a. [L. *bacillum*, little stick] Rod-shaped, or consisting of rod-shaped structures.
- bacillary band** (NEMATA) A modification of the hypodermis, consisting of glandular and nonglandular cells.
- bacillary layer** see **brush border**
- bacilliform** a. [L. *bacillum*, little stick; *forma*, shape] 1. Rod-shaped. 2. (ARTHRO: Insecta) In certain male Diptera, refers to a pair of sclerites in the postabdomen joining the hypandrium and epandrium.
- back** n. [A.S. *baec*, the rear or dorsal part] The dorsal or upper surface.
- back-cross** A cross between a heterozygote and one of its parents.
- back-mutation** The reversion by mutation of a mutant gene to the form from which it was derived.
- bacteremia** n. [Gr. *bakterion*, small rod; *haima*, blood] The presence of bacteria in the hemolymph or blood of invertebrates, without production of harmful toxins or other deleterious effects.
- bacteriophagous** a. [Gr. *bakterion*, small rod; *phagein*, to eat] Feeding on bacteria.
- baculiform** a. [L. *baculum*, stick or rod; *forma*, shape] Appearing rod- or staff-like.
- baculite** n. [L. *baculum*, stick or rod] (MOLL: Cephalopoda) A straight shelled ammonite, extinct at the end of the Cretaceous Period.
- baenomere** n. [Gr. *bainein*, to walk; *meros*, part] (ARTHRO: Insecta) The leg-bearing thoracic segment.
- baenopoda** n. [Gr. *bainein*, to walk; *pous*, foot] (ARTHRO: Insecta) The thoracic legs.
- baenosome** n. [Gr. *bainein*, to walk; *soma*, body] (ARTHRO: Insecta) The thorax.
- Baer's disc** (PLATY: Trematoda) In Aspidogastrea, the large, ventral sucker. see **opisthaptor**.
- bailer** n. [F. *baille*, a bucket] (ARTHRO: Crustacea) An exopod of the maxilla of crayfish and lobsters that functions in regulating the flow of water in the gill chamber; scaphognathite.
- balanced lethals** Heterozygotes in which a gene mutation or chromosome structural change occurs that blocks normal development and is fatal before sexual maturity. see **lethal factor**.
- balanced load** A term describing a decrease in the overall fitness of a population due to the component genes that are maintained in the population because they add to fitness in different combinations, i.e., heterozygotes.
- balanced polymorphism** A polymorphism maintained in the same breeding population by a selective superiority of the heterozygotes over either type of homozygotes. see **transient polymorphism**.
- balancers** n.pl. [L. *bis*, two; *lanx*, plate, pan of a balance] (ARTHRO: Insecta) The halteres of Diptera.
- balanoid** a. [Gr. *balanos*, acorn; *eidōs*, like] Acorn shaped.
- balantin, balantine** n. [Gr. *balantidion*, little bag] (ANN: Oligochaeta) Male and prostatic pores in segment xix.
- Balbani's body/nucleus** The yolk nucleus.
- Balbani ring** (ARTHRO: Insecta) In chironomid Diptera, a large RNA puff on chromosome IV of the salivary glands during larval development.
- bold** a. [ME. *balled*, equivalent to ball, white spot] Lacking specific hair or other surface covering.
- Baldwin effect** The condition in which an organism can stay in a favorable environment, with modification of the phenotype by mutation and selection, until genetic assimilation has been achieved.

- ballonets** n.pl. [OHG. *balla*, a spherical body] (NEMATA: Saccernentea) Four inflated areas in the cephalic region, immediately posterior to the lips, that form a collarette in Gnathostomatidae; head bulb of some authors.
- ballooning** n. [OHG. *balla*, a spherical body] (ARTHRO: Chelicerata) Flying through the air on silken lines spun by spiders.
- band** n. [A.S. *bindan*, band] 1. A transverse marking broader than a line. 2. (ARTHRO: Insecta) *a.* In Diptera, the chromosome pairing of like chromomeres that produce the giant chromosomes. *b.* In male Lepidoptera, a descriptive term of a linear series of cornuti.
- barb** n. [L. *barba*, beard] 1. Any spine or hair-like bristle with a process projecting obliquely or crosswise from the surface. 2. A spine with teeth pointing backward.
- barbate, barbatus** a. [L. *barba*, beard] Tufts or fascicles of hair or short bristles; bearded; having tufts of hair.
- barbula** n.; pl. **-lae** [L. dim. *barba*, beard] (ARTHRO: Insecta) In Coleoptera, a tuft of hairs or short bristles at the sides of the abdomen near the anal region of scarabaeoid larvae.
- bark** n. [Sw. *bark*, rind] (PORIF) The outer casing of spongin of those having discontinuous fiber structure.
- baroreceptor, baroreceptor** n. [Gr. *baros*, weight; L. *capere*, to take] An organ perceiving changes in pressure.
- barotropism** n. [Gr. *baros*, weight; *tropein*, to turn] A response to pressure stimuli.
- barrier** n. [OF. *barre*, bar] An obstacle or obstruction that limits the spread or distribution of animals.
- barrier reef** see **coral reef**
- basad** adv. [L. *basis*, base; *ad*, to] Toward the base.
- basal** a. [L. *basis*, base] Pertaining to the base; near the point of attachment of a structure or appendage.
- basalar** a. [L. *basis*, base; *ala*, wing] (ARTHRO: Insecta) Pertaining to the sclerites below the wing base.
- basal bud** (BRYO: Gymnolaemata) The bud arising from the basal wall of the parent zooid. see **distal bud**.

- basal canal** (BRYO) The circumoral lacuna of the lophophore into which the internal lacunae of all the tentacles open.
- basal diaphragm** (BRYO: Stenolaemata) The diaphragm acting as the floor of the living chamber.
- basal disc** (BRYO: Stenolaemata) The encrusting proximal-most part of an ancestrula.
- basalia** a. [L. *basis*, base] (PORIF) Pertaining to spicules protruding from the lower surface of a sponge.
- basalis** n. [L. *basis*, base] (ARTHRO: Insecta) The main mandibular sclerite to which all other parts are joined.
- basal knobs** (NEMATA) The posterior knobs of the oral stylet. see **stylet knobs**.
- basal lamina** (PORIF) The attachment surface.
- basal margin** (ARTHRO: Crustacea) In Cirripedia, the lower edge of the *scutum*, tergum or other plates.
- basal plates** 1. (ECHINOD: Crinoidea) A cycle of 5 aboral calyx plates in primitive stalked crinoids. see **radial plates**. 2. (NEMATA) The circular base of the cephalic framework, composed of an annular structure with posteriorly directed rim, the basal ring, and six radial elements.
- basal platform** (BRYO: Gymnolaemata) In Cheilostomata, the multizoidal skeletal layers of the basal zooidal walls; basal plate.
- basal ring** (NEMATA) The annular structure that extends posteriorly from the outer margin of the basal plate of the cephalic framework.
- basal sclerites** (ARTHRO: Insecta) In Diptera, two lateral, vertical lamellae uniting ventrally to form a trough that lodges the pharynx.
- basal suture** (ARTHRO: Insecta) In Isoptera, the line along which the wing separates from the body and shedding takes place.
- basal window** (BRYO: Gymnolaemata) In Cheilostomata, the subcentral, uncalcified section of an encrusting colony's exterior basal zooidal wall.
- basal zooidal wall** (BRYO) In Stenolaemata and Gymnolae-

mata, the interior or exterior zooidal supporting wall, normally parallel to the orificial wall.

base n.; pl. **bases** [L. *basis*, base] 1. The bottom of anything. 2. The main ingredient in anything that is a fundamental element or constituent. 3. The portion of a body to which an appendage or structure is attached. 4. (MOLL) The extremity opposite the apex of a shell spire.

basement membrane 1. The noncellular membrane underlying the epidermal cells of the body wall that separates it from the body cavity. 2. (ARTHRO: Insecta) Applied also to the inner surface of the eye; the basilemma.

basicarnal angle (ARTHRO: Crustacea) In Cirripedia, the intersection of the basal and median dorsal margins of the dorsal plate (tergum).

basicerite n. [Gr. *basis*, base; *keras*, horn] (ARTHRO: Crustacea) In Decapoda, the second segment of the antennal stalk of shrimp (Caridea) that bear flattened exopods.

basiconic peg (ARTHRO: Insecta) Sensory organs in the form of short hairs or pegs projecting above the general surface.

basicosta n. [L. *basis*, base; *costa*, rib] (ARTHRO: Insecta) The basal part of the *coxa*, as indicated by the basicostal suture. **basicostal** a.

basicostal suture (ARTHRO: Insecta) A strengthening ridge that indicates the external basal part of the *coxa*, the basicosta.

basicoxite n. [L. *basis*, base; *coxa*, hip] (ARTHRO: Insecta) The narrow basal rim of the *coxa*.

basifemoral ring (ARTHRO: Chelicerata) In Acari, the suture in the basal segment of the *femur*, that separates the basi- and telofemur of the leg.

basifemur n. [L. *basis*, base; *femur*, thigh] (ARTHRO: Chelicerata) In Acari, a segmental division of the *femur*, separated from the telofemur by the basifemoral ring.

basilaire see **jugum**

basilar a. [L. *basis*, base] Related to or situated at the base.

basilateral angle see **basitergal angle**

basilemma see **basement membrane**

basimandibula n. [L. *basis*, base; *mandibulum*, lower jaw] (ARTHRO: Insecta) In Orthoptera, a narrow sclerite between the mandible and gena; a trochantin.

basimaxilla n. [L. *basis*, base; *maxilla*, upper jaw] (ARTHRO: Insecta) The basal maxillary sclerite.

basimetical n. [Gr. *basis*, base; *metrikos*, of measuring] The vertical or horizontal distribution of organisms at the sea-bottom.

basinym n. [Gr. *basis*, base; *onyma*, name] The name upon which new names of species or higher classifications has been based. see **isonym**.

basiocludent angle (ARTHRO: Crustacea) In Cirripedia, the intersection of basal and occludent margins of the scutum.

basiophthalmite n. [Gr. *basis*, base; *ophthalmos*, eye] (ARTHRO: Crustacea) The proximal segment of the eyestalk, that articulates with the distal segment (podophthalmite) bearing the corneal surface of the eye.

basiperiphallus n.; pl. **-li** [Gr. *basis*, base; *peri*, around; *phallos*, penis] (ARTHRO: Insecta) In Protura, the basal ring of the periphallus, into which the acroperiphallus is sometimes retracted.

basipharynx n. [Gr. *basis*, base; *pharynx*, gullet] (ARTHRO: Insecta) The epipharynx and hypopharynx combined.

basipod(ite) n. [Gr. *basis*, base; *pous*, foot] 1. (ARTHRO: Insecta) The second segment of a telopodite; the first trochanter. 2. (ARTHRO: Crustacea) see **basis**.

basiproboscis n. [Gr. *basis*, base; *proboskis*, trunk] (ARTHRO: Insecta) In Diptera, the basal portion of the proboscis; the rostrum.

basipulvilli n.pl. [L. *basis*, base; *pulvillus*, small cushion] (ARTHRO: Insecta) In Diptera, the small lateral sclerite at the base of the pulvillus.

basirostral a. [L. *basis*, base; *rostrum*, bill] At the rostrum base.

basis n; pl. **bases** [L. *basis*, base] 1. A general term for the base of any appendage. 2. (ARTHRO: Crustacea) *a.* A proto-

pod segment adjoining the coxa and carrying the exopod and endopod distally. *b*. The basipodite. *c*. A basal calcareous or membranous plate functioning in anchorage of sessile barnacles to the substrate.

basiscopic a. [Gr. *basis*, base; *skopein*, to view] Looking toward the base. see **acroscopic**.

basiscutal angle (ARTHRO: Crustacea) Intersection of basal and scutal margins of the tergum in thoracic barnacles.

basisternum n. [L. *basis*, base; *sternum*, breastbone] (ARTHRO: Insecta) That part of a thoracic sternum anterior to the sternacostal suture and/or the sternal apophyses; sternannum; antesternite. see **furcasternum**.

basistylus n. [Gr. *basis*, base; *stylos*, pillar] (ARTHRO: Insecta) 1. In Diptera, the basal segment of the gonopods. 2. In Protura, the basal part of the stylus. see **dististylus**.

basitarsal ring (ARTHRO: Chelicerata) A suture separating the basitarsus and telotarsus of the legs; mesotarsal ring.

basitarsal scissure (ARTHRO: Chelicerata) A scissure separating the basitarsus and telotarsus of the leg.

basitarsus n.; pl. **-si** [Gr. *basis*, base; *tarsos*, flat of the foot] (ARTHRO) 1. The proximal division of a tarsus; the metatarsus. 2. In Chelicerata, separated from the telotarsus by the basitarsal ring or scissure. **basitarsal** a.

basitergal angle (ARTHRO: Crustacea) Intersection of the basal and tergal margins of the scutum of thoracic barnacles.

basitibial plate (ARTHRO: Insecta) In Apoidea, a small plate or scalelike projection at the base of the hind tibia.

basitrichous isorhiza, **basitrich** (CNID) Isorhizal nematocyst with spines at the base of the tube only.

basivalvula n.; pl. **-lae** [L. *basis*, base; dim. *valva*, fold] (ARTHRO: Insecta) A small sclerite at the base of the first valvulae of the genitalia.

basopinacocytes n.pl. [Gr. *basis*, base; *pinax*, tablet; *kytos*, container] (PORIF) Cells that form the basal epithelium; in *Corvomeyenia*, a fresh-water sponge, they actively ingest and digest bacteria.

batatiform a. [L. *batata*, sweet potato; *forma*, shape] Resembling the shape of a sweet potato.

Batesian mimicry A form of deceptive mimicry in which a palatable species assumes the appearance of a species distasteful or poisonous to a predator; false warning color; allosematic color; pseudaposematic color. see **Mullerian mimicry**.

bathmis see **pterostigma**

bathyal a. [Gr. *bathys*, deep] That zone over the continental slope to a depth of perhaps 2000 meters.

bathylimnetic a. [Gr. *bathys*, deep; *limne*, marsh] Pertaining to or inhabiting the depths of fresh water lakes or marshes.

bathymetric a. [Gr. *bathys*, deep; *metron*, measure] 1. Pertaining to the science of measuring depths of oceans, seas or other large bodies of water. 2. Pertaining to the vertical or altitudinal distribution of organisms.

bathymetric zone One of the horizontal divisions of an ocean; one of the contour zones of the ocean or sea.

bathypelagic a. [Gr. *bathys*, deep; *pelagos*, sea] Living on or near the bottom in the depths of the ocean. see **epipelagic**, **mesopelagic**.

battery n.; pl. **-ies** [F. *battre*, to beat] (CNID: Hydrozoa) A group of nematocysts on the tentacles of hydras and some other hydroid polyps.

batumen n. [uncertain origin] (ARTHRO: Insecta) A layer of propolis, or hard cerumen plus various other materials that enclose the nest cavity of a colony of stingless bees.

batumen plates (ARTHRO: Insecta) Batumen walls partitioning portions of a larger cavity from that utilized as a nest cavity by stingless bees.

bave n. [F. *bave*, drivel] (ARTHRO: Insecta) The double thread of fluid silk spun by caterpillars.

B-chromosome, **supernumerary**, **accessory** or **extra chromosomes** Any chromosome of a heterogeneous category of chromosomes that differ in their behavior from normal or A-chromosomes.

bdelloid a. [Gr. *bdella*, leech; *eidos*, form] Being leech-like in

appearance.

bead n. [A.S. *gebed*, prayer] (MOLL: Bivalvia) A rounded rib protuberance.

beaded see **moniliform**

beak n. [OF. *bec*, beak] 1. Anything projecting and ending in a point. 2. (ARTHRO) *a.* In Chelicerata, the gnathosome of acarines. *b.* In Crustacea, the anteroventral projection of the free margin of the carapace; not equivalent to rostrum. *c.* In Insecta, the snout, proboscis, or rostrum; in Homoptera, usually 3-segmented, arising from the ventroposterior of the head and directed backward under the body. 3. (BRACHIO) The pedicel valve. 4. (BRYO) The avicularia. 5. (MOLL) *a.* An angular projection of the apex of an intermediate valve; a mucronate valve; a similar projection of the upper surface of the valve anteriorly and between the sutural laminae is termed a false beak. *b.* In Bivalvia, nose-like angle, along or above the hinge margin, marking the area of shell growth. *c.* In Cephalopoda, paired horny mandibles.

beaked apex (ARTHRO: Crustacea) In Balanomorpha, the upper angle of the tergum formed into a long narrow point.

bean shaped see **reniform**

beard n. [L. *barba*, beard] 1. Any tuft of filaments on any part of an organism. 2. (ARTHRO: Insecta) For Diptera, see *mystax*. 3. (MOLL) see **byssus**. **bearded** a.

bedeguar, bedegar n. [F. *bedeguar*, Per. *bad-awar*, wind-brought] (ARTHRO: Insecta) A cynipid gall of *Rhodites rosae*; a pin-cushion gall.

beebread n. (ARTHRO: Insecta) A bitter pollen stored by bees in the honeycomb that when mixed with honey is used for food by larvae and newly-emerged workers; *cerago*. see **ambrosia, fungus garden**.

bee dance (ARTHRO: Insecta) A series of movements performed by honeybees upon returning to the hive, that informs other bees of the location of the food source.

bee lice (ARTHRO: Insecta) Small, flattened, apterous dipteran flies that are commensal with honeybees, often epizoic on the workers or queens.

bee milk see **worker jelly**

bees n.pl. [A.S. *beo*, bee] (ARTHRO: Insecta) The flower-visiting, social or solitary, aculeate hymenopterous insects belonging to the superfamily Apoidea.

beeswax n. [A.S. *beo*, bee; *weax*, wax] (ARTHRO: Insecta) A wax secreted by glands on the ventral surface of the abdomen of worker bees that is used in the construction of honeycombs.

belemnoid a. [Gr. *belemnion*, javelin; *eidos*, form] Dartlike in shape.

bell n. [A.S. *belle*, bell] 1. Any bell-shaped structure. 2. (CNID) *a.* In Hydrozoa, the umbrella of jellyfish. *b.* In Scyphozoa, the nectophores of siphonophores. 3. (NEMATA) The bursa.

Bellonci organ see **organ of Bellonci**

bell shaped see **campanulate**

belonoid a. [Gr. *belone*, needle; *eidos*, form] Needle-like in shape.

benthic a. [Gr. *benthos*, depths of sea] Pertaining to the sea-bottom; maybe extended to include some of the benthic animals: crabs, snails, starfish, certain worms, clams, sponges, sea anemones, corals, bryozoans, crinoids, barnacles and tunicates.

benthopotamous a. [Gr. *benthos*, depths; *potamos*, river] Pertaining to organisms or plants living on the bottom of a river or stream.

Bergmann's rule The principal that the average body size is geographically variable in that the animals are larger in the cooler climates of the range of a species.

Berlese's organ see **Ribaga's organ**

berry n. [A.S. *berie*, berry] (ARTHRO: Crustacea) An egg of certain Decapoda.

besomiform a. [A.S. *besma*, broom; L. *forma*, shape] Broom shaped.

beta n. [Gr. *beta*] The second letter of the Greek alphabet (β) used to designate the second in a series, as -chlorophyll and -chlorophyll.

beta-chlorophyll (ARTHRO: Insecta) The chlorophyll that produces color.

beta-female see **teratogyne**

beta taxonomy A level of taxonomy involving the arrangement of species into a natural system of lower and higher taxa. see **alpha taxonomy**, **gamma taxonomy**.

bialate a. [L. *bis*, two; *alatus*, winged] Two-winged.

biangular a. [L. *bis*, two; *angulus*, corner, bend] Having two angles or double keeled.

biarcuate a. [L. *bis*, two; *arcuatus*, bent like a bow] Twice curved.

biareolate a. [L. *bis*, two; *areolatus*, small places] Two celled, or having two areolae. see **bilocular**.

biarticulate a. [L. *bis*, two; dim. *artus*, joint] Having two joints; diarticular.

biaxial a. [L. *bis*, two; *axis*, axle] Having two axes.

bicanaliculate a. [L. *bis*, two; *canalis*, a channel] Having two channels or grooves.

bicarinate a. [L. *bis*, two; *carina*, keel] Having two carinae or keel-like projections.

bicaudal, bicaudate a. [L. *bis*, two; *cauda*, tail] Possessing two tails or anal processes.

bicellular a. [L. *bis*, two; *cellula*, little cell] Composed of two cells.

biciliate a. [L. *bis*, two; *cilium*, eyelash] Furnished with two cilia, flagella, or elaters.

biconcave a. [L. *bis*, two; *concavus*, hollow or arched inward] Being concave on both sides; amphicoelous. see **amphicyrtic**.

bicondylic see **dicondylic**

biconic a. [L. *bis*, two; Gr. *konos*, cone] Being formed as two cones placed base to base.

biconvex a. [L. *bis*, two; *convexus*, arched outward] Being convex on opposite sides; lens-shaped. see **amphicyrtic**, **amphicoelous**.

bicorn a. [L. *bis*, two; *cornu*, horn] Bearing two horns; crescentlike.

bicornuate a. [L. *bis*, two; *cornutus*, horned] Having two horns or cephalic processes.

bicornuate uterus A uterus in which both uteri are fused, but have short lateral extensions.

bicron see **nanometer**

bicuspidate a. [L. *bis*, two; *cuspidatus*, pointed] Being double pointed; having two cusps or points.

bidactyl n. [L. *bis*, two; Gr. *daktylos*, finger] (ARTHRO) An appendage, ambulacrum, apotele, or claw with two lateral ungues. see **monodactyl**, **tridactyl**.

bideficiency n. [L. *bis*, two; *deficare*, to be wanting] A form of phanerotaxy, exhibited by the absence of two of the elements typically present in a particular organism. see **holotaxy**.

bidentate a. [L. *bis*, two; *dens*, tooth] Having two teeth.

bidenticulate a. [L. *bis*, two; dim. *dens*, tooth] Having two small teeth or tooth-like processes.

bidesmotic a. [L. *bis*, two; Gr. *desmos*, bond] Pertaining to two tendons attached at the base of the distal segment of an appendage; a eudesmotic articulation.

bidiscoidal a. [L. *bis*, two; Gr. *diskos*, circular plate; *eidōs*, form] Having two disc-shaped parts.

bidiverticulate a. [L. *bis*, two; *devertere*, to turn away] Having two diverticula.

biemarginate a. [L. *bis*, two; *emarginatus*, notched at the apex] Having two notches on the border or edge.

biennial a. [L. *bis*, two; *annus*, year] Occurring once every two years.

bifacial a. [L. *bis*, two; *facies*, face] Having opposite surfaces alike.

bifarious a. [L. *bis*, two; *fariam*, in rows] Being arranged in 2 rows, on either side of an axis; being oriented or pointed in opposite directions.

- bifasciate** a. [L. *bis*, two; *fascia*, band] With two broad well defined bands or fascia.
- bifenestrate** a. [L. *bis*, two; *fenestra*, window] (NEMATA: Secernentea) A term used to describe heteroderid fenestra divided by a broad vulval bridge so that it appears to be two distinct semi-fenestra. see **ambifenestrate**.
- bifid** a. [L. *bis*, two; *findere*, to split] Divided into two branches, arms, or prongs, or into two equal parts by a cleft; separated down the middle by a slit; divided by a groove into two parts.
- bifilar** a. [L. *bis*, two; *filum*, thread] Having two filaments, threads, or fibers.
- biflabellate** a. [L. *bis*, two; *flabellum*, fan] (ARTHRO) Twice fabelate; a form of antenna with each side of the joints having long flattened processes.
- biflagellate** a. [L. *bis*, two; *flagellum*, whip] Having two flagella; dikont.
- biflex** a. [L. *bis*, two; *flectere*, to bend] Bending in two directions.
- bifoliate colony** (BRYO: Stenolaemata) An erect colony formed by two layers of zooids budding back to back from the interior multizoidal median wall.
- bifollicular** a. [L. *bis*, two; *folliculus*, small sac] Having two follicles.
- biforate** a. [L. *bis*, two; *forare*, to bore] Having two perforations.
- biform** a. [L. *bis*, two; *forma*, form] Having two forms, or combining characteristics of two forms.
- biformes** n. [L. *bis*, two; *forma*, form] (ARTHRO: Crustacea) A carapace that reflects sexual dimorphism in differing valve proportions for each sex of the same species.
- biforous spiracle** (ARTHRO: Insecta) An immature's spiracle having two entrances (air tubes); annular-biforous spiracles.
- bifurcate** a. [L. *bis*, two; *furca*, fork] Divided into two branches, stems or knobs; two pronged.

- bigeminal** a. [L. *bis*, two; *geminus*, twin] Doubled; paired.
- bigener** n. [L. *bis*, two; *genus*, kind] A bigeneric hybrid.
- bigeneric** a. [L. *bis*, two; *genus*, kind] Pertaining to hybrids between species of different genera.
- bigiceriate, bigigeriate** a. [L. *bis*, two; *gigerium*, entrail] Having two gizzards.
- biguttate** a. [L. *bis*, two; *gutta*, drop, spot] Having two drop-like spots.
- bijugate** a. [L. *bis*, two; *jugum*, yolk] Being yoked two together; two-paired.
- bilabiate spiracle** (ARTHRO: Insecta) An elongate or annular spiracle of certain larvae with a pair of projecting lips interior to the peritreme; one having two lips at the slit-like entrance.
- bilamellar** a. [L. *bis*, two; *lamella*, plate] Having two lamellae or plates; two-lipped.
- bilaminar** a. [L. *bis*, two; *lamina*, thin plate] Consisting of two lamina or thin plates; diploblastic.
- bilaminate colony** (BRYO: Gymnolaemata) A cheilostomate colony with erect branches comprised of two layers of zooids, each with separate, but common exterior basal walls.
- bilateral** a. [L. *bis*, two; *latus*, side] Having two equal or symmetrical sides.
- bilateral cleavage** That in which the blastomeres exhibit marked bilateral symmetry.
- Bilateralialia, Bilatera** A former division of the animal kingdom containing all those forms that show bilateral symmetry.
- bilateral symmetry** Symmetry such that a body or part can be divided through the longitudinal axis by one mediosagittal plane into equivalent right and left halves, each for all practical purposes a mirror image of the other. see **radial symmetry**.
- biliary vessels** see **Malpighian tubules**
- bilineate** a. [L. *bis*, two; *lineatus*, of a line] Of or pertaining to two lines; marked with two lines.
- bilobate, bilobed** a. [L. *bis*, two; *lobus*, rounded projection]

Having two lobes.

bilocular a. [L. *bis*, two; *loculus*, compartment] Divided into two cells, chambers, compartments or loculi.

bimaculate a. [L. *bis*, two; *macula*, spot] Marked with two spots or stains.

bimarginate a. [L. *bis*, two; *margo*, border] Having two margins.

bimineralic skeleton (BRYO: Gymnolaemata) Zoarium or zooecium composed of layers of calcite and others of aragonite.

bimuscular a. [L. *bis*, two; *musculus*, muscle] Having two muscles.

binary a. [L. *binarius*, from *bini*, pair] 1. Composed of two units, elements or parts. 2. Refers to designations of two kinds of names. see **binominal nomenclature**.

binary fission A form of asexual reproduction in which a cell, or organism divides into approximately equal parts. see **transverse fission**.

binary nomenclature see **binominal nomenclature**

binate a. [L. *bini*, pair] Doubled; growing in pairs.

binervate a. [L. *bis*, two; *nervus*, nerve] Having two nerves or veins.

binocular a. [L. *bini*, pair; *oculus*, eye] Having two eyes.

binodulose a. [L. *bis*, two; *nodulus*, little knot] Having two nodes, knobs, or swellings of small size.

binomen n. [L. *bis*, two; *nomen*, name] The scientific designation of a species, consisting of a generic and a specific name. see **binominal nomenclature**, **trinominal nomenclature**.

binomial nomenclature A system of nomenclature using two names, first established for animals by Linnaeus in 1758 and now generally referred to as binominal nomenclature.

binominal a. [L. *bis*, two; *nomen*, name] Consisting of two words or names.

binominal nomenclature The system of nomenclature adopted by the International Congress of Zoology, by

which the scientific name of an animal is designated by both a generic and specific name.

binotate a. [L. *bis*, two; *nota*, mark] Having two rounded spots.

binovular a. [L. *bini*, pair; *ovum*, egg] Pertaining to two ova.

binucleate a. [L. *bis*, two; *nucleus*, kernel] Having two nuclei.

bioassay see **biological assay**

biocellate a. [L. *bis*, two; dim. *oculus*, eye] Having two ocelli.

biocenose n. [Gr. *bios*, life; *koinos*, common] A community of plants and animals that occupy a particular habitat; a biotic community. see **biocoenosis**.

biochemistry n. [Gr. *bios*, life; *chemeia*, chemistry] Biological or physiological chemistry; the chemistry of living organisms.

biochore n. [Gr. *bios*, life; *choros*, place] A subdivision of biocycle, comprising a group of similar biotopes large enough to form a recognizable habitat. see **chore**.

biochrome n. [Gr. *bios*, life; *chroma*, color] Any natural pigment found in a living organism. see **indigoid biochrome**, **quinone biochrome**, **schemochrome**.

biocoen n. [Gr. *bios*, life; *koinos*, common] All of the living components of an environment.

biocoenosis n.; pl. **-noses** [Gr. *bios*, life; *koinos*, common] 1. A community of organisms occupying a biotope. 2. An aggregation of fossils comprised of the remains of organisms living together. see **thanatcoenosis**.

biocommunication n. [Gr. *bios*, life; L. *communicare*, to communicate] The process of conveyance or transfer of information between non-human organisms.

biocontrol see **biological control**

biocycle n. [Gr. *bios*, life; *kyklos*, circle] Subdivisions of the biosphere: land, sea and freshwater.

biodegradable a. [Gr. *bios*, life; L. *de*, down; *gradatus*, step by step; *abilis*, tending to be] Substances that can be broken down by micro-organisms (mainly aerobic bacteria).

biodemography n. [Gr. *bios*, life; *demos*, people; *graphein*, to

write] A science concerned with the statistical study of the ecology and genetics of a given population.

bioecology n. [Gr. *bios*, life; *oikos*, house; *logos*, discourse] The study of the interrelationships of plants and animals and their environment.

bioelectricity n. [Gr. *bios*, life; *elektron*, amber] The electric phenomena within living tissues.

bioenergetics n. [Gr. *bios*, life; *energos*, active] The science of conditions and laws governing the manifestation of energy in living organisms.

biogen n. [Gr. *bios*, life; *genos*, beginning] The hypothetical protoplasmic unit of which cells are composed; precursor of bios.

biogenesis n. [Gr. *bios*, life; *genesis*, beginning] The doctrine that living organisms originate from antecedent life. see **abiogenesis**, **neobiogenesis**.

biogenetic law The recapitulation theory of Haeckel that "ontogeny recapitulates phylogeny". see **palingenesis**.

biogenous a. [Gr. *bios*, life; *gennaen*, to produce] Being produced from living in or on other living organisms; providing life.

biogeny n. [Gr. *bios*, life; *genesis*, beginning] The evolution of organisms, comprising ontogeny (individual) and phylogeny (tribal).

biogeochemistry n. [Gr. *bios*, life; *ge*, earth; *chemeia*, chemistry] The study of the distribution and movement of chemical elements within living organisms and their interaction with the geographical environment.

biogeography n. [Gr. *bios*, life; *ge*, earth; *graphein*, to write] That biological science dealing with the geographical distribution of plants and animals. see **zoogeography**.

bioherm n. [Gr. *bios*, life; *herma*, mound] A body of rock composed largely of sedentary organisms such as corals and mollusks.

biological a. [Gr. *bios*, life; *logos*, discourse] Pertaining to biology, the science of living things.

biological assay, **bioassay** The determination of the effect of

any stimulus, physical, chemical, biological, physiological, or psychological, by means of the response which it produces in living organisms or matter.

biological classification The arrangement of organisms into taxa on the basis of inferences concerning their genetic relationship.

biological clock An endogenous physiological rhythm, such as metabolic or behavioural rhythmical changes. see **circadian**.

biological control The reduction in population of undesirable animals and plants by the intentional introduction of a predator, parasite or disease; biocontrol.

biological productivity The increase in biomass, normally measured in protein-time units.

biological races Noninterbreeding sympatric populations that are morphologically alike, but physiologically different due to preference for food or other hosts. see **sibling species**.

biological species concept A concept at the species level stressing reproductive isolation, and the possession of a genetic program effecting such isolation; biospecies. see **species**.

biology n. [Gr. *bios*, life; *logos*, discourse] The scientific study of living things.

bioluminescence n. [Gr. *bios*, life; L. *luminescere*, to grow light] The production of light by living organisms, as occurs in the insect orders of Collembola, Homoptera, Diptera and Coleoptera, all ctenophores, some cephalopods, a large number of polychaetes, and certain diplopods; biophotogenesis.

biolysis n. [Gr. *bios*, life; *lysis*, to loosen] The disintegration of life or organic matter; the decomposition of organic matter as a result of the activity of living organisms; death. **biolytic** a.

biomass n. [Gr. *bios*, life; L. *massa*, quantity, bulk] The total weight of a population or other specified group of individuals per unit of area or volume.

biome n. [Gr. *bios*, life] A major biological community of living

organisms characterized by distinctive dominant vegetation and associated animals.

biometeorology n. [Gr. *bios*, life; *meteoros*, high in the air; *logos*, discourse] The science of the relationship of plants and animals to weather.

biometer n. [Gr. *bios*, life; *metron*, measure] An indicator organism that determines climate and condition acceptability.

biometry n. [Gr. *bios*, life; *metron*, measure] The statistical study of biological phenomena; the application of mathematics to the study of living organisms. see **biostatistics**.

biomorphic a. [Gr. *bios*, life; *morphe*, form] Concerning the development or change of form of a living organism by the formation of tissues.

bion n. [Gr. *bios*, life; *on*, being] 1. A living, independent organism; a living cell or unit; synonymous with "individual". 2. Sometimes used as a variant spelling of biome; a biont.

bionomy, bionomics see **ecology**

biont n. [Gr. *bion*, life; *on*, being] A living thing; a member of a biome.

biophagous a. [Gr. *bios*, life; *phagein*, to eat] Pertaining to an organism that feeds upon other living organisms or tissues.

biophore, biophor n. [Gr. *bios*, life; *phorein*, to carry] A hypothetical ultimate supramolecular unit capable of life.

biophotogenesis see **bioluminescence**

biophysics n. [Gr. *bios*, life; *physis*, nature] The application of the laws of physics to the study of living organisms.

bioplasm n. [Gr. *bios*, life; *plassein*, to mold] Protoplasm.

bioplast n. [Gr. *bios*, life; *plassein*, to mold] 1. A minute mass of living protoplasm. 2. An amoeboid cell.

biopoiesis n. [Gr. *bios*, life; *poiesis*, making] The origination of the first living thing, as well as the preceding chemical history.

biopotentiality n.; pl. **-ties** [Gr. *bios*, life; L. *potens*, powerful] The potential of a tissue developing into different structures.

biopsy n. [Gr. *bios*, life; *opsis*, sight] The study of tissues of

living organisms.

biordinal crochets (ARTHRO: Insecta) Crochets of larvae arranged in a single series or row, but having two alternating lengths. see **ordinal**.

bios n. [Gr. *bios*, life] Plant and animal life; organic nature.

biosis n. [Gr. *biosis*, manner of life] 1. The condition of being alive. 2. The condition of a specific mode of life.

biospecies see **biological species concept**

biospeleology n. [Gr. *bios*, life; *spelaiion*, cave; *logos*, discourse] The scientific study of cave-dwelling organisms.

biosphere n. [Gr. *bios*, life; *sphaira*, ball] That portion of the earth that contains living organisms, encompassing the soil, air and water.

biostasis n. [Gr. *bios*, life; *stasis*, a standing] The ability of organisms to tolerate environmental alterations without being changed themselves.

biostatics n.pl. [Gr. *bios*, life; *statos*, stationary] The science of the structure of organisms in relation to their function.

biostatistics n. [Gr. *bios*, life; *statos*, stationary] The branch of biometry that deals with vital statistics.

biostrome n. [Gr. *bios*, life; *stroma*, bed] (MOLL: Bivalvia) Bio-coenosis of hard shelled, sedentary organisms or sediment from them.

biosynthesis n. [Gr. *bios*, life; *synthesis*, composition] The formation of an organic compound by an organism.

biosystem see **ecosystem**

biosystematics n. [Gr. *bios*, life; *systema*, an ordered arrangement of things] The study of the biology of populations in respect to evolution and variation of a taxon; experimental taxonomy.

biota n. [Gr. *bios*, life] The fauna and flora of an area or region.

biotic a. [Gr. *biotikos*, of life] Of or pertaining to life.

biotic insecticide An organism used to suppress a local pest population.

- biotic potential** 1. The reproductive potential of a species. 2. An estimate of the rate of increase of a species in the absence of predators, parasites or other inhibiting factors.
- biotonus** n. [Gr. *bios*, life; *tonos*, tension] The ratio between assimilation and dissimilation of a hypothetical unit, cell, organ or organelle (biogen).
- biotope** n. [Gr. *bios*, life; *topos*, place] 1. An area that is uniform in its main climatic, soil and biotic conditions. 2. An ecological niche with suitable conditions for certain fauna and flora. see **biochore**, **core**.
- biotular** spicules (PORIF) Amphidiscs; having scalloped disks that may occur at both ends of the rhabdome.
- biotype** n. [Gr. *bios*, life; *typos*, type] A group of genotypically identical individuals; frequently used interchangeably with the term race.
- biovular** see **binovular**
- biovulate** a. [L. *bis*, two; *ovum*, egg] Having two ovules.
- biparasitic** a. [L. *bis*, two; *parasitus*, one who eats at the table of another] Being a parasite upon or in a parasite.
- biparental** a. [L. *bis*, two; *parentalis*, parent] Pertaining to or derived from two parents.
- biparietal** a. [L. *bis*, two; *paries*, wall] Provided with two paries.
- biparous** a. [L. *bis*, two; *parere*, to beget] Producing two young at a time.
- bipartite** a. [L. *bis*, two; *partitus*, divided] Having two distinct parts; bifid.
- bipartite uterus** A uterus with paired, tubular uteri that fuse at the point of junction with the vagina.
- bipectinate** a. [L. *bis*, two; *pecten*, comb] Having branches on two sides like the teeth of a comb.
- bipectunculate** a. [L. *bis*, two; *pectunculus*, small scallop] Minutely pectinate.
- bipennate** a. [L. *bis*, two; *penna*, feather] Twice pinnate. **bipenniform** a.
- bipinnaria larva** (ECHINOD: Asteroidea) The free-swimming,

bilaterally symmetrical larva; characterized by ciliated pre-oral and postoral bands and extending onto lobes projecting from the body; dipleurula larva. see **brachiolaria**.

- biplicate** a. [L. *bis*, two; *plicatus*, fold] Twice plaited or folded.
- bipocillus** n. [L. *bis*, two; *poculum*, cup] (PORIF) A spicule (microscelere) with a curved shaft and cup-shaped expansion at either end; in Iophon, one discoid end and one pointed or forked end.
- bipod** a. [L. *bis*, two; Gr. *pous*, foot] Having one pair of legs. bipody n. see **tetrapod**.
- bipolar** a. [L. *bis*, two; *polus*, pole] 1. Having two poles or processes. 2. Pertaining to the polar regions.
- bipolarity** n. [L. *bis*, two; *polus*, pole] 1. Being bipolar. 2. Pertaining to the polar regions, as comparing the flora and fauna between the northern regions and the southern regions, and with that in between. 3. Nerves having processes at both ends.
- biprostatic** a. [L. *bis*, two; *pro*, before; *stare*, to stand] Having two prostates.
- bipupillate** a. [L. *bis*, two; *pupilla*, pupil of the eye] 1. Having two pupils. 2. Having two ocelli or spots that resemble two pupils.
- biradial cleavage** Cleavage in which the tiers of blastomeres are symmetrical with regard to the first cleavage plane.
- biradial symmetry** A type of symmetry in which an organism consists of radially arranged parts, equally arranged on each side of a median longitudinal plane.
- biradiate** a. [L. *bis*, two; *radiatus*, rayed] Having two rays or spokes. see **diactinal**, **diaxon**.
- biramous** a. [L. *bis*, two; *ramus*, branch] Consisting of two branches.
- biramous appendage** (ARTHRO: Crustacea) An appendage with two rami; also antennule or antenna with two flagellar elements; not all appendages of a crustacean are biramous.
- biramous parapodium** (ANN) A parapodium having bundles of setae on both noto- and neuropodium.

- birefringent** a. [L. *bis*, two; *refringens*, refractive] Having double refraction, high or low according to the difference between the refractive indices.
- birostrate** a. [L. *bis*, two; *rostrum*, beak] Having two beak-like processes.
- birotulate spicules** (PORIF) A spicule having a disc or series of radial, umbrella-like spokes at both ends; amphidiscs.
- birth pore** Uterine pore; birth opening.
- bisegment** n. [L. *bis*, two; *segmentum*, piece] One of two equal segments of a line.
- biseptate** a. [L. *bis*, two; *septum*, partition] Having two partitions.
- biserial** a. [L. *bis*, two; *series*, row] Arranged in two rows, or subdivided into two series.
- biserial crochets** (ARTHRO: Insecta) Crochets of larvae with proximal ends arranged in two, usually concentric rows. see **serial crochets**.
- biserrate** a. [L. *bis*, two; *serra*, saw] Having two notched or saw-teeth.
- bisetose** a. [L. *bis*, two; *seta*, bristle] Having two bristle-like appendages.
- bisexual** a. [L. *bis*, two; *sexus*, sex] 1. Of or pertaining to both sexes. 2. A population composed of functional males and females. 3. An individual possessing functional male and female reproductive organs; hermaphrodite.
- bisinate** a. [L. *bis*, two; *sinuare*, to bend] Twice winding or bending; having two sinuations or notches.
- bistrate** a. [L. *bis*, two; *stratum*, layer] Having two layers of tissues.
- bisulcate** a. [L. *bis*, two; *sulcus*, groove] Of or pertaining to twice scored or grooved.
- bithecal** a. [L. *bis*, two; *theke*, case] 1. Having two thecae. 2. (ANN) Having two spermathecae.
- bituberculate** a. [L. *bis*, two; *tuberculum*, swelling] Having two tubercles or swellings.
- biuncinate** a. [L. *bis*, two; *uncus*, hook] Having two hooks.

- bivalent** a. [L. *bis*, two; *valens*, strong] 1. Having two completely or partially homologous chromosomes pairing during the first meiotic division. see **univalent**. 2. Double or joined in pairs; pertaining to an articulation permitting levator and depressor movements.
- bivalve** a. [L. *bis*, two; *valvae*, a folding door] Having two valves or parts; clamlike.
- Bivalvia, bivalves** n., n.pl. [L. *bis*, two; *valvae*, a folding door] A class of marine, estuarine or freshwater bivalve mollusks, in which the body is enclosed within two calcareous valves, or shells; other names for this class are Acephala, Conchifera, Pelecypoda, Conchophora, Dithra, Lamellibranchia, Lamellibranchiata, Elatobranchiata, Cormopoda, Tropicoda, Aglossa, Elatocephala, Anodontoda and Lipocephala.
- bivittate** a. [L. *bis*, two; *vitta*, band] Having two broad longitudinal stripes or vittae.
- bivium** n. [L. *bivius*, two-way] (ECHINOD: Asteroidea) Collectively, the two rays of a sea star, between which lies the madreporite. see **trivium**.
- bivoltine** a. [L. *bis*, two; It. *volta*, time] Having two sets of offspring a year. see **polyvoltine**.
- bivulvar** a. [L. *bis*, two; *vulva*, vulva] Having two vulvae in a single female.
- bladder** n. [A.S. *blaeddre*, bag] Any membranous sac or vesicle filled with air or fluid.
- blade** n. [A.S. *blaed*, leaf] 1. Any elongate, flattened, usually stiff structure shaped like a leaf, sword or knife. 2. (ARTHRO: Insecta) The lacinia or galea. 3. (NEMATA) see **lamina**.
- blastaea** n. [Gr. *blastos*, bud] Hypothetical animal ancestral to all metazoans; inferred from the blastula as a common stage in the development of higher invertebrate animals.
- blastema** n.; pl. **-temata** [Gr. *blastema*, bud] 1. Undifferentiated cells that later develop into an organ or structure. *a*. The part of an organism that gives rise to a new organism, as in asexual reproduction. *b*. That which often gives rise to regeneration of a lost part or appendage. see **anlage**.

- blastocephalon** n. [Gr. *blastos*, bud; *kephale*, head] (ARTHRO: Insecta) The head of an embryo.
- blastochrome** n. [Gr. *blastos*, bud; *ochema*, vehicle] (CNID) A reproductive bud in certain medusae.
- blastochyle** n. [Gr. *blastos*, bud; *chylos*, juice] Fluid contained in a blastocoel.
- blastocoel(e)** n. [Gr. *blastos*, bud; *koilos*, hollow] The primary cavity formed during the embryological development of animals; segmentation cavity; the subgerminal cavity.
- blastocyst** n. [Gr. *blastos*, bud; *kystis*, bladder] (PLATY: Cestoda) In Trypanorhynca, a posterior bladder of the metacestode into which the body is withdrawn.
- blastocyte** n. [Gr. *blastos*, bud; *kytos*, container] An embryonic cell before differentiation.
- blastoderm** n. [Gr. *blastos*, bud; *derma*, skin] The primary epithelium formed in early embryonic development of many invertebrates; germinal membrane.
- blastogenesis** n. [Gr. *blastos*, bud; *genesis*, beginning] 1. Development by asexual reproduction, or of an organ or part from a blastema. 2. The transmission of inherited characters by germ plasm. see **embryogenesis**.
- blastogenic** a. [Gr. *blastos*, bud; *genos*, birth] Originating in germ cells.
- Blastoidea, blastoids** n., n.pl. [Gr. *blastos*, bud; *eidos*, form] A class of extinct echinoderms of the former Subphylum Pelmatozoa; Ordovician to Permian.
- blastokinesis** n. [Gr. *blastos*, bud; *kinesis*, movement] Displacements, rotations and revolutions of an embryo within an egg.
- blastomere** n. [Gr. *blastos*, bud; *meros*, part] Cells formed during primary cleavage of an egg, before the formation of a distinct gastrula stage.
- blastophore** n. [Gr. *blastos*, bud; *phorein*, to bear] 1. The external opening of the enteron of a gastrula. 2. (ANN) The endodermal cells brought into an internal position in the embryo during the mitotic division.
- blastopore** n. [Gr. *blastos*, bud; *poros*, passage] The mouth-

like opening from the archenteron to the exterior during the gastrula stage of development.

- blastostyle** n. [Gr. *blastos*, bud; *stylos*, pillar] (CNID: Hydrozoa) The living axial portion of a modified gonangium, from which numerous medusae are budded.
- blastozoid** n. [Gr. *blastos*, bud; *zoion*, animal; *eidos*, form] A zoid or individual produced by asexual reproduction. see **oozoid**.
- blastula** n., pl. **-lae** [Gr. dim. *blastos*, bud] A stage near the end of cleavage, in the form of a hollow sphere bounded by a single layer of cells.
- blister** n. [A.S. *blastr*, a swelling] Any vesicle or raised spot on the surface of an organism.
- Blochmann's body** (ARTHRO) Any intracellular organisms in the egg; mainly bacteria; thought to be symbiotic.
- blood** n. [A.S. *blod*, blood] The variously colored or colorless fluid circulating in the vascular system or body cavity of animals, usually containing respiratory pigments, and carrying oxygen, food-materials, excretions, etc.
- blood cells** Cellular elements of the blood; hemocytes; plasmatocytes.
- blood channel** (ARTHRO: Insecta) In predacious larvae, a channel, either internal (duct or tube) or external (excavation or groove), usually extending the full length of the inner margin of the mandible.
- blood gills** (ARTHRO: Insecta) Thin walled respiratory or osmoregulatory evaginations continuous with the hemocoel and filled with blood, occurring *in*, but not confined to aquatic larvae.
- blood rooms** (ARTHRO: Crustacea) In Conchostraca, a network of anastomosing cavities in the body that function in blood circulation.
- blood sinus** (MOLL: Bivalvia) A blood vessel which is irregular in shape without specialized walls.
- blood tube** see **blood channel**
- blood vessel** Any vessel or canal facilitating blood circulation.

blotch n. [OF. *block*, a clod of earth] A large irregular spot or marking.

blunt v. [uncertain origin] To dull; to neutralize or dilute.

boat-shaped see **navicular**, **scaphoid**

body n. [A.S. *bodig*, body] 1. The physical structure of an organism. 2. The main part of an organism as compared to its limbs or appendages. 3. The trunk. 4. The corpus.

body cavity The principal cavity between the body wall and internal organs of an organism: coelom, pseudocoelom or hemocoelom.

body of Giardini see **chromatin body**

body ring (ARTHRO: Crustacea) In Notostraca, the combined tergite and sternite of a single somite, with or without legs.

body somite (ARTHRO: Crustacea) A unit division comprising thorax and abdomen. see **cephalic somite**.

body valve see **intermediate valve**

body wall 1. The integument, the outer layer of many invertebrates, comprising the epidermis (hypodermis) and the cuticle. 2. (BRYO) The wall enclosing the body cavity of a colony and its parts. 3. (ECHI) The dermal, glandular, muscular and epithelial tissues that make up the wall of the trunk.

body whorl see **last whorl**

bolsters n.pl. [A.S. *bolster*, support] (MOLL) A pair of supports and muscle attachments for the radula.

bolus n. [Gr. *bolos*, lump] Any rounded mass, such as collected or chewed food.

bombifrons n.pl. [F. *bombe*, convex; L. *frons*, forehead] (ARTHRO: Insecta) A rounded, blister-like protuberance on the forward part of the head.

bombous a. [F. *bombe*, convex] A curved or rounded surface; blister-like.

bombycic acid (ARTHRO: Insecta) An acid utilized by certain moths to dissolve the gum binding the silk threads of the cocoon at imago emergence.

bombycinous a. [Gr. *bombycinus*, silken] Of silk, or pale yel-

low resembling fresh spun silk.

book gill (ARTHRO: Chelicerata) In Merostomata, a gill composed of thin plates or lamella.

book lung (ARTHRO: Chelicerata) A series of leaf-like respiratory pouches of arachnids, located on the internal ventral surface of the abdomen, and believed to be modified insunken gills.

bopyridum n. [NL. *Bopyrus*, type genus] (ARTHRO: Crustacea) In Malacostraca, a postlarva of an epicaridean isopod that attaches to a permanent host.

Bordas' gland (ARTHRO: Insecta) A paired, or fused into one, accessory gland of the sting apparatus of certain Hymenoptera, composed of multiple, densely packed cells whose canaliculi end with a gathering duct; function unknown.

boreal a. [L. *boreas*, north wind] Of or belonging to the northern biogeographical region.

borer n. [A.S. *borian*, bore] 1. An invertebrate that bores. 2. (ARTHRO: Insecta) An adult or larva that makes channels in woody or vegetable tissue. 3. (MOLL: Bivalvia) A pelecypod that burrows in stone or wood. 4. (MOLL: Gastropoda) One that bores through the shell of an oyster or other mollusk.

boss n.; pl. **bosses** [F. *bosse*, hump] 1. Any protruberant part, prominence or swelling. 2. (ARTHRO: Chelicerata) In Arachnida, a smooth lateral prominence at the base of a chelicera of spiders. 3. (ARTHRO: Crustacea) An umbo. 4. (ARTHRO: Insecta) In Diptera, a sclerotized, elevated area at the base of the ventral brush in certain Culicidae larvae. 5. (ECHINOD: Echinoidea) The base of a spine on a sea urchin test. 6. (MOLL: Gastropoda) A rounded elevation of a shell, larger than a tubercle.

bosselated a. [F. *bosse*, hump] Being covered with small knob-like projections, composed of or covered with small protuberances.

bothridial seta (ARTHRO: Chelicerata) Various shaped seta inserted into a bothridium.

bothridium n.; pl. **-ria** [Gr. dim. *bothros*, trench] 1. (ARTHRO: Chelicerata) A chitinous cavity or projecting cup in which a bothridial seta is inserted; (bothridial seta + bothridium =

trichobothrium). 2. (PLATY: Cestoda) One of 4 muscular lappets on the scolex of a tapeworm, often highly specialized with many types of adaptations for adhesion.

bothriotrichia n.pl. [Gr. *bothros*, trench; *trichos*, hair] (ARTHRO: Insecta) Slender seta arising from indentions in the tegument. **bothronic** a.

bothrium n.; pl. **-ria** [Gr. *bothros*, trench] (PLATY: Cestoda) Dorsal or ventral grooves on the scolex that may be variously modified in the form of ruffles, or fused so as to form a tubular structure.

botrucnids n.pl. [Gr. *botrys*, bunch of grapes; *knide*, nettle] (CNID: Anthozoa) The septal filaments of certain mesenteries of tube anemones.

botryoidal a. [Gr. *botrys*, bunch of grapes; *eidos*, form] In the form of a bunch or cluster of grapes.

botryoidal tissue (ANN: Hirudinoidea) Connective tissue present in the enteric canals.

botryology n. [Gr. *botrys*, bunch of grapes; *logos*, discourse] The science of organizing objects or concepts into groups and clusters.

bottle-shaped see **lagena**, **ampulla**, **ampulliform**

bouquet stage A meiotic prophase stage, including leptotene, zygotene and pachytene, in certain species where the chromosomes are oriented by one or both ends towards one point of the nuclear envelope.

bourrelet n. [F. *bourrelet*, circular pad] 1. A ridgelike prominence or rounded edge. 1. (ARTHRO: Insecta) see parameres. 2. (ECHINOD) A raised prominence on the interambulacral plates at the edge of the mouth. 3. (MOLL: Bivalvia) A ligamental area anterior and posterior to the resilifer.

bourses copultrices see **copulatory chamber**

bouton n. [F. *bouton*, bud] (ARTHRO: Insecta) A lappet-like terminal process of the glossa of bees; spoon; flabellum.

bowlike see **arc**, **arcuate**

box n.; pl. boxes [A.S., fr. 1. *buxus*, boxwood] (MOLL: Bivalvia) A pair of empty, attached hinged (valves) shells of oysters.

brachelytra n.pl. [Gr. *brachys*, short; *elytron*, sheath] (ARTHRO: Insecta) Having shortened wing covers or elytra. **brachelytrous** a.

brachia n.pl. [L. *brachium*, arm] 1. Processes like arms. 2. (ARTHRO: Insecta) *a.* Paired, unfused processes resembling arms surrounding the aedeagus; clasper; paramere. *b.* A tracheal or blood gill. 3. (BRACHIO) see **brachidium**.

brachial a. [L. *brachium*, arm] 1. Pertaining to an arm-like process or appendage. 2. (ARTHRO: Insecta) Pertaining to the fore wing.

brachial canal (CNID: Scyphozoa) A canal in the oral arm of medusae.

brachial basket (ARTHRO: Insecta) In Odonata, a barrel-like chamber in the anterior two-thirds of the rectum that functions by the intake and expulsion of water; rectal gills.

brachial valve (BRACHIO) A valve containing any skeletal support for the lophophore, generally smaller than the pedicle valve; dorsal valve.

brachidium n.; pl. **brachidia** [L. dim. *brachium*, arm] (BRACHIO) The internal skeleton or brachial support for the lophophore, consisting of a calcareous loop or spire.

brachiolaria n.; pl. **-lariae** [L. dim. *brachium*, arm] (ECHINOD: Asterozoa) The free-swimming, ciliated larva that develops from the bipinnaria and is characterized by three additional arms extending from the anterior part of the ventral surface, anterior to the preoral loop.

brachiole n. [L. dim. *brachium*, arm] (ECHINOD: Crinozoa) The slender arm or arms extending from the ambulacral groove.

brachiophores n. [L. *brachium*, arm; Gr. *phorein*, to bear] (BRACHIO) Blades of the secondary shell projecting from the side of the notothyrium and forming anteromedian boundaries of sockets in some brachial valves.

Brachiopoda, **brachiopods** n.; n.pl. [Gr. *brachys*, short; *pous*, foot] A phylum of relatively small, solitary coelomates enclosed within a bivalved shell and usually attached to the substrate by a pedicle; common called lamp shells; brachiopods have one of the longest and best recorded fos-

sil histories in the animal kingdom.

brachitaxis n.; pl. **-taxes** [Gr. *brachium*, arm; *taxis*, arrangement] (ECHINOD: Crinoidea) A series of brachials extending from radial or biradial to the distal extremity of the arm.

brachium see **brachia**

brachycerous a. [Gr. *brachys*, short; *keras*, horn] Bearing short antennae.

brachydactyly n. [Gr. *brachys*, short; *daktylos*, digit] Abnormally short digits.

brachymeiosis n. [Gr. *brachys*, short; *meiosis*, to make smaller] Meiosis with the second meiotic division omitted.

brachypleural a. [Gr. *brachys*, short; *pleuron*, side] (ARTHRO: Insecta) Pertaining to shortened pleura or side plates.

brachypodous a. [Gr. *brachys*, short; *pous*, foot] Bearing a short stalk or legs.

brachypterous a. [Gr. *brachys*, short; *pteron*, wing] (ARTHRO: Insecta) Having short or abnormally short wings that do not cover the abdomen. see **macropterous**.

brachypterous neoteinic see **nymphoid reproductive**

brachyptery see **brachypterous**

brachystomatous a. [Gr. *brachys*, short; *stoma*, mouth] (ARTHRO: Insecta) Having a short proboscis, as certain Diptera.

brachytrachea n.; pl. **-eae** [Gr. *brachys*, short; *tracheia*, windpipe] (ARTHRO: Chelicerata) In Acari, an elongate, sac-like structure, sometimes branched, that functions in respiration.

brachyurous a. [Gr. *brachys*, short; *oura*, tail] Having a reduced abdomen; having a short tail.

braconid venom gland (ARTHRO: Insecta) A type of venom gland where numerous gland tubes end basically in the reservoir that has muscles but no glandular elements. see **apid venom gland**.

bract n. [L. *bractea*, small leaf] (CNID: Hydrozoa) A protective medusoid (hydrophyllium or phyllozoid) siphonophoran

with a simple or branched gastrovascular canal.

bracteiform a. [L. *bractea*, small leaf; *forma*, shape] Bractlike.

bracteose a. [L. *bractea*, small leaf] With numerous bracts.

bradyauxesis n. [Gr. *bradys*, slow; *auxesis*, growth] A form of heterauxesis in which the growth process of a part is less than that of the whole. see **isauxesis**

bradygenesis n. [Gr. *bradys*, slow; *genesis*, beginning] Retarded development in ontogeny. see **tachygenesis**.

bradytelic a. [Gr. *bradys*, slow; *telos*, completion] Pertaining to evolution, evolving slowly; slower than the standard rate. see **horotelic**.

brain n. [A.S. *braegen*, brain] 1. The nervous center of invertebrates. 2. (ARTHRO) The cephalic nerve mass; the encephalon, the supraesophageal ganglion; the archicerebrum. 3. (NEMATA) The nerve ring and associated ganglia.

brain hormone (ARTHRO: Insecta) A secretion of the brain activating the prothoracic glands.

branch n.; pl. **branches** [OF. *branche*, branch] 1. That which puts forth branches. 2. A primary division of a taxonomic group. 3. A gill.

branched see **ramify**

branchia n.; pl. **-chiae** [Gr. *branchia*, gills] Respiratory organs; a gill; a ctenidium.

branchial a. [Gr. *branchia*, gills] Pertaining to gills or branchiae.

branchial aperture The exterior opening of a gill chamber.

branchial basket (ARTHRO: Insecta) In Odonata, a chamber of the rectum that contains the rectal gills.

branchial carina (ARTHRO: Crustacea) In Decapoda, that part of the carapace extending posteriorly from the opening (orbit) in the anterior face over the branchial region.

branchial chamber (ARTHRO: Crustacea) That area between the body and carapace enclosing the branchiae; the gill chamber.

branchial cleft A gill slit.

branchial crown (ANN: Polychaeta) A structure surrounding the terminal mouth composed of ciliated, bipinnate filaments functioning in suspension filter feeding and respiration; tentacular crown.

branchial glands 1. (ARTHRO: Crustacea) Masses of connective-tissue cells, lacking ducts, that surround the venous channels in branchiae. 2. (MOLL: Cephalopoda) Glands along the gill where they connect with the mantle; site of hemocyanin production.

branchial heart (MOLL: Cephalopoda) One of two hearts that pumps blood to the gills of squid.

branchial passage (MOLL: Bivalvia) A passage in gills that carries parts of the exhalant water system.

branchial plume (ANN: Polychaeta) In certain Sabellidae and Serpulidae, a structure around the terminal mouth comprised of semicircular lobes bearing a few to a series of grooved, ciliated filaments or radioles, each with a series of paired ciliated side branches or pinnules functioning in filter feeding and respiration.

branchial ray A gill ray.

branchial region (ARTHRO: Crustacea) In Decapoda, the lateral part posterior to the pterygostomial region, overlying the branchiae.

branchial siphon (MOLL) The incurrent siphon.

branchiate a. [Gr. *branchia*, gills] Having gills or branchiae.

branchicolous a. [Gr. *branchia*, gills; *colere*, to inhabit] Parasitizing gills.

branchiform a. [Gr. *branchia*, gills; *forma*, shape] Shaped like gills.

branchiocardiac a. [Gr. *branchia*, gills; *kardia*, heart] Pertaining to gills and heart.

branchiocardiac carina (ARTHRO: Crustacea) That part of a carapace dividing the branchial and cardiac region.

branchiocardiac groove (ARTHRO: Crustacea) In Decapoda, an oblique groove on each side of the carapace separating the branchial and cardiac regions.

branchiocardiac sinus (ARTHRO: Crustacea) One of several sinus channels that facilitates blood flow from the gills to the pericardial sinus and then to the heart.

branchiopallial a. [Gr. *branchia*, gills; L. *pallium*, mantle] (MOLL) Pertaining to the gill and mantle.

branchiopneustic a. [Gr. *branchia*, gills; *pneustikos*, of breathing] (ARTHRO: Insecta) Pertaining to a form of respiration in larvae where the spiracles are functionally replaced by gills.

branchiostegal area (ARTHRO: Crustacea) That part of a carapace extending laterally and ventrally over the branchiae.

branchiostegal spine (ARTHRO: Crustacea) In Decapoda, a spine on the carapace between the antennal and pterygostomial spines.

branchiostegite n. [Gr. *branchia*, gills; *stegos*, roof] (ARTHRO: Crustacea) Expanded dorsal and lateral branchial region of the carapace that covers the gills.

branchireme n. [Gr. *branchia*, gills; *remus*, oar] (BRACHIO) Any limb.

branchitellum n.; pl. **branchitella** [Gr. dim. *branchia*, gills; *telos*, end] (MOLL: Bivalvia) A point on the posteroventral shell margin of oysters at the aboral end of the gills near the palliobranchial fusion.

breakage plane or joint The site of autotomy in invertebrates.

breastbone n. [A.S. *breost*, front of the chest; *ban*, bony] 1. The sternum. 2. (ARTHRO: Insecta) In certain dipterous larvae, a horny ventral process behind the oral opening, representing the labium; anchor process; sternal spatula.

breathing pore see **spiracle**

brephic a. [Gr. *brephos*, embryo] 1. Pertaining to an early stage of development. 2. (BRACHIO) The juvenile stage in shell development after protegulum, shown by presence of growth lines; from neanic shells, distinguished by absence of radial ornamentation.

brevaceratuba n.; pl. **-tubae** [L. *brevis*, short; *cera*, wax; *tuba*, trumpet] (ARTHRO: Insecta) A wax gland of scale in-

sects with an outlet short of the margin of the pygidium.

breviate a. [L. *brevis*, short] 1. Shortened; smaller than normal. 2. (ARTHRO: Insecta) Used to describe antennae that are about the length of the head.

brevicaudate a. [L. *brevis*, short; *cauda*, tail] Having a short tail.

brevilingual a. [L. *brevis*, short; *lingua*, tongue] Having a short tongue.

breviorate antennae (ARTHRO: Insecta) A term to describe antennae extending passed the head, but short of the body length. see **brevissimate antenna**.

breviped a. [L. *brevis*, short; *pes*, foot] Having short legs.

brevipennate a. [L. *brevis*, short; *penna*, wing] Having short wings.

brevirostrate a. [L. *brevis*, short; *rostrum*, beak] Having a short beak or rostrum.

brevissimate antennae (ARTHRO: Insecta) Antennae length shorter than head length.

bridge n. [A.S. *brycg*, bridgework] 1. Chromosome arrangement at anaphase of meiosis produced from a dicentric strand. 2. (ARTHRO: Insecta) In Odonata, a connecting wing vein.

bridge cross vein (ARTHRO: Insecta) A cross vein anterior to the bridge vein.

bridging host An intermediate host that allows a parasite to go to a previously unsuitable host.

bridle see **frenulum**

brin n. (ARTHRO: Insecta) A filament of silk of silkworms; when coated with sericin, two adhere together, forming the bave.

Brindley's gland (ARTHRO: Insecta) In certain adult Heteroptera, simple sac-like structures of the scent gland system, occurring in the hemocoel below the first visible abdominal tergite, towards the lateral margin.

bristle n. [A.S. *byrst*, hair] Any of various stiff, coarse hairs or hairlike structures.

bristle setae (NEMATA: Adenophorea) Ambulatory setae func-

tioning in traction.

brit n. sing. & pl. [Corn. *bryth*, speckled] The minute marine animals, mainly crustaceans, that form an important link in the food chain of the aquatic environment.

brochosomes n.pl. [Gr. *brochos*, cord; *soma*, body] (ARTHRO: Insecta) In leafhoppers, ultramicroscopic reticulated bodies, products of the Malpighian glands.

bromatium n.; pl. bromatia [Gr. *broma*, food] A hyphal swelling on the fungus cultured by fungus ants on organic debris in underground galleries.

bronchia see **trachea**

brood n. [A.S. *brod*] The individuals hatched at the same time from eggs by a single parent and normally mature at about the same time.

brood canal (ARTHRO: Insecta) In Stylopidea, the passage between the female parasite and its puparium; a brood chamber.

brood capsule (PLATY: Cestoda) A small hydatid cyst containing 10 to 30 protoscolices; parasites of carnivores.

brood chamber 1. (ARTHRO: Crustacea) *a.* In Cladocera, a dorsal space between the trunk and enveloping carapace containing developing eggs and newly hatched young. *b.* In Peracarida, a space arising from the coxae of the thoracic limbs, forming a marsupium in which eggs develop directly, without external metamorphosis. 2. (ARTHRO: Insecta) see brood canal. 3. (BRYO) *a.* In Gymnolaemata, water-filled space partly enclosed by the body wall of one or more polymorphs, in which embryos grow during development. see **ovicell**. *b.* In Stenolaemata, a zooidal or extrazooidal internal coelomic chamber that encloses eggs developing into larvae. 4. (ECHINOD) see marsupium. 5. (MOLL: Gastropoda) In female Argonauta, a beautiful, calcareous, bivalve case secreted by the two dorsal arms into which the eggs are deposited; females retain and usually remain with the posterior of her body in the case; when disturbed, she withdraws completely into the retreat.

brood pouch Any space or sac-like cavity utilized as a uterus, in which eggs or embryos are developed; a brood chamber,

ovisac or marsupium.

broom shaped see **besomiform**

brown bodies 1. (ANN: Oligochaeta) Spheroidal, ellipsoidal or discoidal masses, free in the coelomic cavities, containing corpuscles or brown debris, setae, cysts of parasites, nematodes and various other foreign bodies. 2. (BRYO) In Stenolaemata and Gymnolaemata, an encapsulated mass of degenerating cells from the lophophore, gut, muscles and other nonskeletal parts of a zooid, retained in the body cavity or expelled after regeneration of feeding and digestive organs. see **brown deposit**. 3. (ECHINOD: Holothuroidea) Small clumps of amoebocytes, parasites and other ejecta found in the coelom.

brown deposit (BRYO: Stenolaemata) Granular deposits of iron oxide or pyrite believed to be fossilized organic material of organs or brown bodies of degenerated organs.

brownian movement The continual vibratory movement of small particles dispersed in a fluid medium, as a result of bombardment by the molecules of the medium.

Brunner's organ (ARTHRO: Insecta) A soft tubercle at the base of the hind femur of grasshoppers, against which the caudal tibiae press when at rest.

brush border Projections of microvilli free on the surface of epithelial cells that produce a brush-like appearance.

brushes n.pl. [OF. *brousse*, brushwood] 1. A cluster of bristles, stout hairs or scales. 2. (ARTHRO: Insecta) *a.* In Diptera, anterior "mouth bristles" of some mosquito larvae, that may or may not be prehensile; posterior or respiratory siphon area bristles. *b.* In Lepidoptera, anterior pheromone hair-like scales of noctuid moths, or posterior abdominal brush of smooth hairs, function unknown.

brush-organs (ARTHRO: Insecta) In male Lepidoptera, anterior pheromone-producing paired glands, storage organs and distributive brushes functioning to elaborate and disperse sex attractants.

brustia (ARTHRO: Insecta) Small spines or setae on the mandibles.

Bryozoa, bryozoans n.; n.pl. [Gr. *bryon*, moss; *zoon*, animal]

A phylum of sessile aquatic coelomates, formerly subdivided into Ectoprocta and Entoprocta, and commonly called moss animals.

bucca n.; pl. **buccae** [L. *bucca*, cheek] 1. The cheek. 2. (ARTHRO: Insecta) That area on both sides of the head below the compound eye and just above the mouth opening.

buccal a. [L. *bucca*, cheek] Pertaining to the mouth or cheek.
bucally adv.

buccal appendage (ARTHRO) Any articulating mouth part.

buccal cavity 1. The mouth or oral cavity. 2. (NEMATA) The stoma.

buccal cone (ARTHRO: Chelicerata) In Acarina, that portion of the mouthparts composed of hypostome and labrum.

buccal field (ROTIF) A division of the corona; pertaining to the area surrounding the mouth.

buccal fissure The mouth opening.

buccal frame (ARTHRO: Crustacea) In Brachyura, the structural region of the cephalon that encloses the mouthparts.

buccal funnel (ARTHRO: Insecta) In Siphunculata, that portion of the fore-intestine that extends into the pharynx.

buccal groove (ARTHRO: Crustacea) In Nephropidae, a transverse groove that connects the gastroorbital and antennal grooves crossing the mandibular elevation behind the antennal spine.

buccal mass (MOLL) A bulging mass comprising the radula and associated structures.

buccal tentacles/cirri (ANN) Elongate or digitiform food gathering appendages in or around the mouth.

buccal tube 1. (ARTHRO: Insecta) see food meatus. 2. (ROTIF) The tubular, ciliated area between the mouth and mastax.

buccate a. [L. *bucca*, cheek] Having distended or protuberant cheeks.

bucciniform a. [L. *buccinum*, a horn-shaped mollusk; *forma*, shape] (MOLL: Gastropoda) Resembling a trumpet shape; resembling the shape of a Buccinum mollusk.

buccopharyngeal a. [L. *bucca*, cheek; Gr. *pharynx*, throat] 1.

Pertaining to the cheeks and pharynx. 2. Pertaining to the mouth and pharynx.

buccopharyngeal armature see **cephalopharyngeal skeleton**

buccopharyngeal/salvatory gland (MOLL: Gastropoda) In precocious Prosobranchia, a gland producing a sulfuric acid-containing secretion that is injected into its victim.

bucculla n.; pl. **bucculae** [L. dim. *bucca*, cheek] (ARTHRO: Insecta) One of two ridges on the underside of the head on either side of the beak or rostrum.

Bucephalus cercaria (PLATY: Trematoda) Larva of the furcocercous group with the oral sucker on the midventral surface as in adults, with the tail arising from a large bulbous structure instead of a stem.

Buchner funnel A funnel with an interior perforated plate on which filter paper is placed that functions in vacuum filtration.

bud n. [ME. *budde*, bud] A young individual produced by budding, prior to detachment from the parent.

budding n. [ME. *budde*, bud] 1. The asexual reproduction of a new individual as the result of an outgrowth or bud from the parent organism. 2. (ARTHRO: Insecta) see **colony fission**.

buffered populations Populations of organisms affecting one another in such a way as to maintain a population density mean.

buffer species An alternative food for a predator, thereby, buffering the effect of the predator on its normal prey.

Bugel organ (ARTHRO: Insecta) A sense organ attached to the back of the tympanum, containing two scolopidia supported by an apodemal ligament and an invagination of the tympanal frame.

bulb n. [L. *bulbus*, a swelling] Any hollow globose organ.

bulbose, bulbous, bulbar a. [L. *bulbus*, a swelling] Pertaining to or resembling a bulb.

bulbus ejaculatorius (ARTHRO: Insecta) Ductus ejaculatorius. *a.* In some Hymenoptera, the swollen almost spherical

structure. *b.* In Lepidoptera, the distal part. *c.* In Diptera, a muscled, syringe-like structure.

bullae n.; pl. **bullae** [L. *bullae*, bubble] 1. A rounded prominence, blister- or knob-like. 2. (ARTHRO: Crustacea) A structure secreted by the head and maxillary glands of certain parasitic female copepods that serves as an anchor for attachment to gill filaments of fish. 3. (ARTHRO: Insecta) *a.* Weakened spots on concave wings that allows them to bend. see **stigma**. *b.* In diaspid Hemiptera, located in the terminal outlet of wax glands (*ceratuba*) at the inner end. *c.* In scarabaeoid Coleoptera, a sclerite that closes the trachea. 4. (NEMATA: Secernentea) In Heteroderidae, knob-like structures within the vulval cone of cysts near the underbridge or fenestra.

bullate a. [L. *bullae*, bubble] Having a blister-like appearance, inflated, swollen.

bulliform a. [L. *bullae*, bubble; *forma*, shape] Bubble-shaped.

bundle n. [A.S. *byndeale*, a binding] 1. A band or group fastened together. 2. A group of nerves, muscles or other fibers; a fascicle.

burden n. [A.S. *byrthen*, load] The total number of infectious parasites of an individual. see **intensity**.

burrow n. [uncert. origin] A hole or excavation used as a shelter and habitation, or place of retreat. see **fossorial**.

bursa n.; pl. **bursae** [L. *bursa*, purse] 1. Any pouch or sac, a sac-like cavity. 2. A lateral cuticular extension adanal, or surrounding the tail of male nematodes and acanthocephalans that functions as claspers or guides during copulation; has also been applied by various workers to all caudal alae. 3. (ECHINOD: Crinoidea) In Ophiurida, formed by infoldings of the body wall of the oral disc to either side of the base of each arm, functioning in gas exchange or as bursal slits. see **bursa copulatrix**.

bursa copulatrix 1. A genital pouch of numerous invertebrates. 2. In certain male nematodes and acanthocephalans, a modified caudal ala or alae, circular or oval, may be divided into two lateral symmetrical or asymmetrical lobes, separated by a dorsal lobe, and supported by rays or pa-

pillae; bursa. 3. (ARTHRO: Insecta) A female copulatory pouch developed from the tubular vagina in the genital chamber for reception of the male aedeagus. see **genital chamber**. 4. (MOLL) A copulatory pouch or sac for receiving sperm that will be stored for only a brief period; copulatory bursa. see **seminal receptacle**. 5. (PLATY: Turbellaria) In planarians, a blind pouch that holds the secretions from the penis and adenodactyl gland (muscular organ), which then activates the sperm.

bursal slits (ECHINOD: Crinoidea) Genital openings of the bursa of Ophiurida, through which water circulates for respiration, and ripe sex cells pass for fertilization or are retained as brood until rupture of the aboral disk. see **ophio-pluteus**.

bursa seminalis see **seminal bursa**

bursicon n. [L. dim. *bursa*, purse] (ARTHRO: Insecta) A hormone associated with hardening and darkening of the cuticle following ecdysis.

bursiform a. [L. *bursa*, purse; *forma*, shape] Formed like a purse.

buschelformigen Korper see **racemose glands**

butt see **hampe**

butress n. [OF. *bouterez*, to thrust] 1. (ARTHRO: Insecta) In Culicidae pupae, a sclerotized, thickened basolateral part of the paddle; external butress; external thickening; nervure. 2. (MOLL: Bivalvia) A radiating ridge on the interior that reinforces the hinge process.

byssaceous a. [Gr. *byssos*, fine flax] Composed of fine filaments.

byssal foramen (MOLL: Bivalvia) An opening in the right valve for passage of byssus in Anomiidae oysters.

byssal gape (MOLL: Bivalvia) An opening between the valve margins for the passage of the byssus.

byssal gland (MOLL: Bivalvia) A viscid secreting gland producing the byssal threads that anchors the organism to rocks and solid objects; also called byssal pit. see **byssus**.

byssal notch (MOLL: Bivalvia) A small opening or notch located

on the ventral margin for the passage of the byssus from the byssal gland.

byssal sinus (MOLL: Bivalvia) Corresponds to the byssal notch of the right valve, but shallower and on the left valve in the Pectinacea.

byssus n.; pl. **byssi**, **byssuses** [L. *byssos*, fine flax] 1. (MOLL: Bivalvia) Fibers or small bundles of silky threads by which they anchor themselves to the substratum; beard. 2. (NEMATA: Adenophorea) A series of elaborately branched projections at the poles of mermithid eggs, by which they attach to plants.