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### Online Dictionary of Invertebrate Zoology: F

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# F

**F 1** First filial generation, arising from a cross, subsequent generations abbreviated F 2 , F 3 , etc. see **P 1** .

**face** n. [L. *facies*, countenance] 1. The surface of anything. 2. (ARTHRO: Insecta) The front of a verticle head between the compound eye above the mouth to vertex. *a.* In Hymenoptera between antennae and clypeus. *b.* In Diptera, below the frontal suture, often having grooves or fovea below the antennae; the mesofacial plate. *c.* In Ephemeroptera, the fused front and vertex; *facies*.

**facet** n. [F. *facette*, small face] 1. A small surface. 2. (ARTHRO: Insecta) The external surface or part of a compound eye unit or ommatidium.

**facette** n. [F. *facette*, small face] (ARTHRO: Pentastomida) A funnel-shaped opening through the inner membrane complex of the egg into which the product of the dorsal organ is deposited.

**faceted eye** see **compound eye**

**facial angle** (ARTHRO: Insecta) The angle formed by the point of union of the face and vertex.

**facial bristles** see **oral vibrissae**

**facial carina** (ARTHRO: Insecta) One of the carinae of the frontal costa and of the accessory carinae of the face. *a.* In Orthoptera, one of the accessory carinae. *b.* In Diptera, the single median facial ridge separating the antennal grooves.

**facial depression** (ARTHRO: Insecta) 1. The antennal groove. 2. For Diptera, the middle of the face; the facial plate.

**facialium** see **vibrissal ridge**

**facial orbit** (ARTHRO: Insecta) On the head, the region next to the mesal margin of a compound eye.

**facial plate** (ARTHRO: Insecta) In Diptera, the central part of the face.

**facial quadrangle** (ARTHRO: Insecta) In bees, the quadrangle

formed by the eyes laterally, and between their apex and below by a line between their lower points.

**facial ridge** see **vibrissal ridge**

**facies** see **face**

**facio-orbital bristles** (ARTHRO: Insecta) In Diptera, bristles on each side near the orbit, may extend to the gena or cheek; orbital bristles. see **genal bristles**.

**factor** n. [L. *facere*, to do, to make] 1. An agent or causative agent in genetics determining development of a hereditary character in offspring. 2. (PORIF) A cell surface-active proteoglycan affecting the stability of cell-to-cell adhesion.

**facultative** n. [L. *facultas*, capability] The ability to live under different conditions. see **obligate**.

**facultative meiotic parthenogenesis** The diploid chromosomal complement in the reduced oocytes is restored by fusion of the second polar nucleus with the egg pronucleus. see **automictic meiotic parthenogenesis**.

**facultative parasite** 1. A parasitic organism that can develop inside a host, but still retains the ability to complete a free-living life cycle in the outside environment. 2. Organisms normally free-living that may become parasitic under special environmental conditions. see **obligate parasite**.

**facultative symbiont** A symbiont that establishes a relationship with a host only if the opportunity presents itself. see **obligate symbiont**.

**faeces** see **feces**

**Fahrenheit's rule** Common ancestors of present day parasites were themselves parasites of the common ancestors of present day hosts; parasite phylogeny mirrors host phylogeny.

**falcate** a. [L. *falx*, sickle] Sickle-shaped, hooked or new moon-shaped.

**falces** n.pl.; sing. **falx**, **falcis** [L. *falx*, sickle] 1. (ARTHRO: Chelicerata) Falces used to denote chelicerae of ticks; chelicerae of certain arachnids. 2. (ARTHRO: Insecta) In lycanid butterflies, when present, paired, sclerotized, curved arms articulated with the caudal margin of the tegumen ventrad

of the *uncus*, and extending ventro-caudad.

**falciform** a. [L. *falx*, sickle; *forma*, shape] Having the shape of a sickle; curved like a sickle.

**falciger** n. [L. *falx*, sickle; *gerere*, to carry] (ANN) A compound, distally blunt, curved seta.

**falcculate** a. [L. dim. *falx*, sickle] Curved with a sharp point.

**falsidentes** see **cibarial teeth**

**false head** (ARTHRO: Insecta) In some syrphid fly larvae, a broad globulose or hood-like cephalic segment(s) with a visible constriction behind.

**false legs** see **prolegs or spurious legs**

**false umbilicus** (MOLL: Gastropoda) A cavity or depression in the base of the last whorl of the shell; a pseudumbilicus.

**famulus** n.; pl. -li [L. *famulus*, servant] (ARTHRO: Chelicerata) In Acari, microsensory seta found on the *genu*, tibia and tarsi.

**fan** n. [A.S. *fann*, fr. L. *vannus*, fan] 1. A segment or process flattened and spread triangularly or in a semicircle, appearing fan-like. 2. (ANN: Polychaeta) The parapodia on the 14th, 15th, or 16th segments. 3. (CNID: Anthozoa) A colony of zooids. 4. A flabellum.

**fang** n. [A.S. *fang*, seizure] (ARTHRO: Chelicerata) The claw-like distal segment of the chelicera of spiders.

**farctate** a. [L. *farctus*, filled] Fully filled; distended; to swell out.

**farinaceous** a. [L. *farina*, flour] 1. Mealy. 2. (ARTHRO: Insecta) Has been used to describe powdery looking insect surfaces and wings; pulverulent; pollinose.

**fascia** n., pl. -ciae [L. *fascia*, bundle] 1. A broad and well-defined band of color; striped. 2. Marked with transverse bands of color. see **vitta**. 3. A layer of connective tissue covering an organ or attaching a muscle. **fasciate** a.

**fascicle, fasciculus** n.; pl. -li, -les [L. dim. *fascia*, bundle] 1. A small bundle or tuft. 2. A bundle of nerve or muscle fibers. 3. (ANN) A bundle of setae originating from a common muscular source, normally two dorsolateral and two

ventrolateral fasciculi per segment. 4. (ARTHRO) A stylet bundle or combination of mouthparts of blood-feeding arthropods that function to pierce the skin. 5. (CNID) Tubes intergrown together to form a stem or branches. 6. (MOLL: Polyplacophora) A bundle of hairs or bristles against each valve end. 7. (PORIF) Fibers intertwined in bundles to produce complex interlocking tracts.

**fasciole** n. [L. dim. *fascia*, bundle] 1. (CNID: Echinoidea) In Spatangidae, a small band of minute spine-bearing tubercles used to produce water currents in the burrow for feeding, respiration and excretion. 2. (MOLL: Gastropoda) A spiral band formed by the successive growth lines on the edges of a canal.

**fascio-maculata** Having spots arranged in bands.

**fascio-punctate** Ornamented with colored points arranged in bands.

**fastening or fixing muscle** (SIPUN) A thin strand or filament of muscle joining or attaching some part of the alimentary canal, (the esophagus or posterior region of the intestine) to the body wall.

**fastigate** a. [L. *fastigium*, gable end] Arranged into a conical bundle.

**fastigium** n. [L. *fastigium*, gable end] (ARTHRO: Insecta) In Orthoptera, the anterior dorsal surface of the vertex of grasshoppers.

**fat body** Aggregated cells that store food reserves, storage for excretory materials, or light producing organ; a center in which many metabolic processes occur.

**fate map** Diagrammatic method of indicating the fate of embryonic cells.

**fauces** n.pl. [L. *fauces*, gullet] That portion of the interior of a spiral shell that can be viewed by looking into the aperture.

**fauna** n. [L. *Faunus*, diety of herds and fields] The animal life of a region. see **flora, biota**.

**faunal region** An area where certain groups of animals are found.

**faveolate** a. [L. *favus*, honeycomb] Pitted; having depressions

or cells resembling a honeycomb; favose.

**feces** n.pl. [L. *faex*, dregs] Pertaining to sediment, refuse or excrement.

**fecula** n. [L. dim. *faex*, dregs] (ARTHRO: Insecta) Excrement.

**fecundate** v.t. [L. *fecundus*, fruitful] To fertilize; to impregnate.

**fecundity** n. [L. *fecundus*, fruitful] The potential reproductive capacity as measured by the quantity of *gametes*, particularly eggs, produced.

**feedback mechanism** Regulation mechanism in cells by which the final product of a metabolic reaction inhibits further production of that product.

**feeding zooid** (BRYO) A zooid that at some developmental stage feeds and provides nourishment to the entire colony.

**feeler** n. [A.S. *felan*, to feel] A tactile organ of many invertebrates.

**felt chamber** (ARTHRO: Insecta) A spongy structure within the spiracular chamber of larval trypetid flies, thought to act as an air filter.

**felt setae** (ANN: Polychaeta) In scale worms, threadlike setae that arise from the notopodia and trail back over the dorsal surface of the animal.

**female ducts** see **gonoduct**, **oviduct**

**female encystment** see **matricidal hatching**

**female funnel** (ANN: Oligochaeta) Enlargement of the ental end of an oviduct of earthworms that facilitates entry of the ova on their way to the exterior.

**female pores** (ANN: Oligochaeta) The external apertures of the female ducts of earthworms.

**femoro-alary organs** (ARTHRO: Insecta) A stridulatory apparatus.

**femorogenu** n. [L. *femur*, thigh; *genu*, knee] (ARTHRO: Chelicerata) In mites, a leg segment resulting from the fusion of the femur and genu.

**femorotibial joint** (ARTHRO) One of the two primary bendings of a typical leg, pertains to the femur and the tibia. see

### **coxotrochanteral joint.**

**femur** n. [L. *femur*, thigh] 1. (ARTHRO: Chelicerata) *a.* In spiders, the thigh; normally the stoutest segment, articulating to the body through the trochanter and coxa and bearing the patella and remaining leg segments at the distal end. *b.* In mites, segment of palp and legs, between the trochanter and genu; sometimes divided into femur 1 (proximal) and femur 2 (distal). 2. (ARTHRO: Insecta) The largest and stoutest part of the leg of most adults; the third segment, located between the trochanter and the tibia.

**fenestra** n.; pl. **-trae** [L. *fenestra*, window] 1. A small opening; a window. 2. An opening through a shell; a foramen. 3. (ARTHRO: Insecta) *a.* Transparent spots or marks on the wings. *b.* In Orthoptera, a small membranous area at the base of an antennae of a cockroach. *c.* In Isoptera, a cavity on the head; a fontanel. *d.* The membranous base of the ommatidia at the junction with the optic nerve of a compound eye; a transparent ocellate spot in an eye. *e.* In male Odonata, the genital opening on the ventral surface of abdominal segment 11. see **fontanelle**. 4. (BRYO: Gymnolaemata) In Cheilostomata, an open space or mesh in reticulate zoaria. 5. (NEMATA) *a.* In Secernentea, the thin membranous area surrounding or on either side of the vulva of a cyst forming nematode (*Heterodera* spp.). *b.* In some marine Adenophorea, the openings in subcuticular helmets through which sensory nerves pass. **fenestrate** a., **fenestration** n.

**fenestrate colony** (BRYO) An erect colony in which the branches form a reticulate pattern.

**fenestrella** n. [L. dim. *fenestra*, window] (ARTHRO: Insecta) In Orthoptera, a transparent spot in the anal area of the anterior wings. see **fenestra**.

**fenestrule** n. [L. dim. *fenestra*, window] (BRYO) A small opening between branches of a fenestrate colony.

**fente** n. [F. *fente*, a hole] (MOLL: Bivalvia) An opening or slit near the hinges when the valves are closed.

**feral** a. [L. *ferus*, wild, untamed] Undomesticated; wild; uncultivated.

**ferment** see **enzyme**

**fermentation chambers** (ARTHRO: Insecta) A tube or pouch in the hind gut where food materials are broken down by various bacteria or protozoa.

**ferreous** a. [L. *ferreus*, of iron] The color metallic gray resembling polished iron.

**ferruginous** a. [L. *ferrugineus*, like iron rust] Rusty red-brown in color.

**ferrule** n. [L. dim. *viria*, bracelet] (NEMATA) A ring or bushing making a tight joint between the odontostyle and odontophore.

**fertile** a. [L. *fertilis*, fruitful] Producing viable *gametes*, capable of producing viable eggs or living offspring. **fertility** n.

**fertilization** n. [L. *fertilis*, fruitful] Fusion of two *gametes*, especially of their nuclei, to produce a zygote.

**fertilization cone** Protuberance on an ovum where the spermatozoon fuses with the ovum.

**fertilization membrane** A delicate membrane that grows outward from the point of contact of the egg and spermatozoon and rapidly covers the surface of the egg.

**fertilizin** n. [L. *fertilis*, fruitful] A chemical causing species specific attachment of spermatozoon to ovum.

**festivus** a. [L. *festivus*, holiday, feast] Having a variety of colors.

**festoon** n. [F. *feston*, garland] Garlands hanging in curves.

**festoons** n.pl. [F. *feston*, garland] (ARTHRO: Chelicerata) Sclerites on the posterior margin of the opisthosoma of certain hard ticks.

**fetid** a. [L. *fetidus*, stinking] Having a disagreeable odor; malodorous.

**fiber** n. [L. *fibra*, thread] 1. Any thread-like structure. 2. (PORIF) A column more homogeneous than a tract.

**fiber layers** (NEMATA) Cuticular strata of dense connective-like tissue that is oblique, ribbonlike, possibly spiral (mesocuticle).

**fibril** n.; pl. **-llae** [L. dim. of *fibra*, thread] Small fibers or

threads within cells.

**fibrillar layer** (NEMATA) In ascarids, a cuticular stratum that consists of a condensation of spongy matrix forming a closely woven network between the internal cortical layer and the matrix layer.

**fibrin** n. [L. *fibra*, thread] A fibrous protein that constitutes muscular tissue and facilitates blood clotting or coagulation.

**fibrinogen** n. [L. *fibra*, thread; gigno, producing] A protein substance of the blood and other body fluids facilitating the production of fibrin.

**fibrocyte** n. [L. *fibra*, thread; Gr. *kytos*, container] Elongated cells derived from connective tissue cells, the fibroblasts, functioning in the production of fibrous tissue.

**fibroin** n. [L. *fibra*, thread] (ARTHRO) 1. A protein found in silk and webs. 2. (ARTHRO: Insecta) In *Bombyx*, a unique protein containing an unusual amount of the simpler amino acids glycine and alanine.

**fibroplasm** n. [L. *fibra*, thread; Gr. *plasma*, molded] (NEMATA) That portion of a muscle cell differentiated into contractile fibers. see **sarcoplasm**.

**fibrous ligament** (MOLL: Bivalvia) The fibrous part of a ligament in which the conchiolin is impregnated with calcium carbonate; elastic to compression.

**fibula** see **jugal lobe**

**fide** v.t. [L. *fidus*, trustworthy] Used to indicate that the author has not seen the work or specimen cited.

**filament plate** (ARTHRO: Insecta) In early embryology, a differentiated sheet of cells connecting the genital and heart rudiments on the same side of the body.

**filamentary appendage** (ARTHRO: Crustacea) In Cirripedia, a membranous process at the base of the cirrus.

**filaria** n. [L. *filum*, thread] (NEMATA: Secernentea) Microfilaria (Spirurida), motile embryo found in the subcutaneous tissue, blood or lymph systems of many animals and man.

**filariform larva** (NEMATA: Secernentea) A post-feeding stage larva characterized by its delicate, elongate structure and

its slim, capillary esophagus.

**filate** a. [L. *filum*, thread] Threadlike, slender, and without appendages.

**filator** n. [L. *filum*, thread] (ARTHRO: Insecta) The silk spinning apparatus of caterpillars. see **spinnerets**.

**file** n. [A.S. *fil*, *feo*, file] (ARTHRO: Insecta) A filelike, rough ridge on the ventral side of the tegmen, near the base, that functions as a part of the stridulating mechanism in crickets and long-horned grasshoppers.

**filiation** n. [L. *filius*, *-ia*, son, daughter] The relationship of offspring; lineage. **filial** a.

**filibranch gill** (MOLL: Bivalvia) Gills with bars of tissues between the limbs of the "U" at intervals with filaments attached to adjacent filaments by specialized ciliary junctions; functioning in inhalent and feeding-ventilating currents.

**filicornia** n. [L. *filum*, thread; *cornu*, horn] (ARTHRO: Insecta) Insects with filiform antennae, e.g., the coleopteran Adephaga.

**filiform** a. [L. *filum*, thread] 1. Hairlike or threadlike. 2. (CNID) Used to describe thread-like tentacles tapering to a point.

**Filippi's glands** see **Lyonnet's glands**

**fillets** n. [L. *filum*, thread] Bands of fibers; any raised rib.

**filose** a. [L. *filum*, thread] Having a threadlike appendage, or terminating in a threadlike process.

**filter apparatus** (ARTHRO: Insecta) Opposing rows of tapering processes of some spiracular atrial walls, clothed with interlacing hairs, that permits passage of air and prevents foreign particles or water from penetrating into the atrium.

**filter chamber** An area that serves to filter suspended matter.

**filter feeder** An animal that feeds on small particles which it filters from the surrounding medium.

**filum terminale** (ARTHRO: Insecta) In Thysanura, tergite XI prolonged into a bristle.

**fimbria** n.; pl. **-briae** [L. *fimbriatus*, fringed] 1. A fringe-like structure. 2. (ARTHRO: Insecta) Ciliated hair terminating

any part.

**fimbriate** a. [L. *fimbriatus*, fringed] 1. With finger-like projections; having a fringed or puckered margin. 2. (ARTHRO: Insecta) An antenna with joints bearing a lateral hair. 3. (MOLL: Gastropoda) A shell with an irregular margin.

**fin** n. [A.S. *finn*, fin] An extension of the body of an aquatic animal used in locomotion or steering.

**finger** n. [A.S. *finger*, finger] 1. Any structure resembling or used like a finger. 2. (ARTHRO: Crustacea) *a.* In Decapoda, one of the scissor-like blades at the end of the cheliped, usually one is movable and one fixed. *b.* In Ostracoda, a dorsal and ventral process of the male copulatory apparatus which are thought to be tactile organs and may also assist in directing or holding certain structures during copulation.

**finger guard** (ARTHRO: Crustacea) In male Ostracoda genitalia, an extension of the ventral cardo alongside the dorsal and ventral fingers.

**firmatopore** n. [L. *firmus*, strong; *porus*, hole] (BRYO: Stenol-aemata) In Tubuliporina, a degenerate zooid that appears as a slender, proximally directed tubule.

**first antenna** see **antennule**

**first axillary** (ARTHRO: Insecta) The sclerite that articulates with the anterior notal process; its anterior necklike portion abuts the base of the subcostal wing vein.

**first incisura** (ARTHRO: Insecta) In scale insects, the pygidial marginal notch on the meson between the median pair of lobes.

**first maxilla** see **maxillulae**

**first maxillae** (ARTHRO: Insecta) The second pair of appendages belonging to the mouth, posterior to the mandibles or jaws; the maxillae.

**first phragma** (ARTHRO: Insecta) A transverse apodeme of Diptera, under the anterior promontory of the mesonotum and internally connecting the antepre-nota.

**first reviser** The first author to publish a definite choice of one among two or more conflicting names or zoological inter-

pretations that are equally available under the ICZN.

**first segment** The nearest segment of any segmented appendage nearest the body at point of attachment.

**first species rule** Authors that specify the first species named in a new genus to be the type of that genus; generally the works of older authors in which no generic type was specified.

**first thoracic spiracle** (ARTHRO: Insecta) The mesothoracic spiracle, sometimes dislocated into the posterior part of the prothorax.

**first trochanter** (ARTHRO: Insecta) The first segment of a telopodite; the basipodite.

**fissate** a. [L. *fissus*, cleft] Cleft or split; having fissures or cracks.

**fissile** a. [L. *fissus*, cleft] Capable of being divided or separated into layers; divided into parallel lamellae.

**fission** n. [L. *fissus*, cleft] The splitting of a single chromosome into two chromosomes; splitting of one organism into two organisms. see **fusion**.

**fissiparous** a. [L. *fissus*, cleft; *parere*, to produce] Reproduction or propagation by fission.

**fissure** n. [L. *fissura*, cleft] A narrow opening, slit, furrow or groove separating adjacent tissues, parts or organs.

**fistula** n.; pl. **-las** [L. *fistula*, pipe] 1. A reed, pipe or tube. 2. (ARTHRO: Insecta) The proboscis of Lepidoptera. **fistular** a.

**fix** v. [L. *fixus*, bind] To kill and preserve specimens for observation and retention.

**fixation** n. [L. *fixus*, bind] (MOLL: Bivalvia) The process of animals permanently attaching themselves to the substrate.

**fixative** n. [L. *fixus*, bind] A chemical compound which has the quality of fixing and preserving specimens for observation and retention.

**fixed finger** (ARTHRO: Crustacea) The distal immovable part of the propodus of the chela; the pollex.

**fixed hairs** see **microtrichia**

**fixed jaw** (ARTHRO: Chelicerata) In Acari, the distal (fixed) part

of the cheliceral segment.

**fixed-wall colony** (BRYO: Stenolaemata) Feeding zooids with oral walls attached to the body apertures.

**flabellate** a. [L. *flabellum*, fan] Having fanlike processes or projections. **flabelliform** a.

**flabellum** n.; pl. **-la** [L. *flabellum*, fan] 1. Any leaflike or fanlike process. 2. (ARTHRO: Crustacea) The thin distal exite of a branchiopod; or epipodite of a thoracopod. 3. (ARTHRO: Insecta) A transparent distal lobe of the glossa of bees; bouton.

**flaccid** a. [L. *flaccus*, flabby] Lacking firmness or elasticity; limp; limber.

**flagellate** a. [L. *flagellum*, whip] 1. Having flagella or whip-like structures. 2. Having a lash-like appendage as the terminal part of an antenna.

**flagellated chamber** (PORIF) Cavities lined with coanocytes.

**flagelliform** a. [L. *flagellum*, whip; *forma*, form] Flagella-like; whip-like; lash-like.

**flagellomere** n. [L. *flagellum*, whip; Gr. *meros*, part] (ARTHRO: Insecta) In Diptera, an individual subdivision or unit of the antennal flagellum; in mosquitoes 13-14 flagellomeres.

**flagellum** n.; pl. **-lums, -lla** [L. *flagellum*, whip] 1. Any of various whiplike appendages. 2. A protoplasmic process, longer than a *cilium*, whose movements usually effect locomotion of the cell. 3. The whip-like tip of the male copulatory organ in some invertebrates. 4. (ARTHRO: Crustacea) The multiarticulate distal portion of the antennule, antenna, or exopod. 5. (ARTHRO: Insecta) The distal portion of an insect antenna beyond the second segment (pedicel). see **flagellomere**. 6. (PORIF) A long projection from a cell, used as a propeller.

**flame bulb** Common name for solenocytes.

**flame cell** see **solenocyte**

**flammaules** n.pl. [L. *flammula*, blaze; Gr. *aule*, court] Having spots of color resembling a small flame; reddish, tinged with red.

**flange** n. [OF. *flangier*, flank] 1. A projecting rim, edge, or ex-

ternal or internal rib; a guide attachment for another part or organ. 2. (ARTHRO: Crustacea) In ostracods, a ridge along the valve margin formed by projection of the outer lamella as a narrow brim. 3. (NEMATA) Posteriorly sloping thickening or knob at the base of the odontostyle extension.

**flank** n. [OF. *flanc*, side] (MOLL: Bivalvia) The middle of the valve surface, bounded posteriorly by the posterior ridge.

**flaring** a. [Uncertain] To open, spread or project outward; spreading from within toward outward; a lip.

**flatworms** Classes Trematoda, Turbellaria and Cestoda; Platyhelminthes.

**flavescent** a. [L. *flavus*, yellow] A yellow color.

**flavid** a. [L. *flavus*, yellow] Golden yellow; sulphur yellow.

**flavones** n.pl. [L. *flavus*, yellow] Plant pigments that can be incorporated into the tissues of insects which contribute to their coloration. see **anthocyanins**, **anthoxanthins**, **carotene pigments**.

**flavous** see **flavid**

**fleshy filament** (ARTHRO: Insecta) A flexible, attenuate process of the body wall on some butterfly larvae.

**flex** v. [L. *flectere*, to bend] To bend or curve back.

**flexor** a. [L. *flectere*, to bend] Pertains to muscle that serves to bend a limb at an articulation.

**flexor surface** A surface brought closer together when a jointed structure is bent at a joint.

**flexuous** a. [L. *flexuosus*, full of turns] Having gentle turns and windings in opposite directions; zigzag.

**flexure** n. [L. *flexura*, a winding] 1. A bending. 2. (MOLL) The progressing folding or warping of one or both valves.

**float** n. [A.S. *flotian*, float] An air filled sac used for buoyancy by an organism or its eggs.

**floatoblast** n. [A.S. *flotian*, float; Gr. *blastos*, bud] (BRYO) A statoblast with a peripheral pneumatic *annulus*, with or without marginal hooks.

**flocculent** a.; pl. **-li** [L. *floccus*, lock of wool] Covered with a

soft, waxy substance, often resembling wool; clinging together in bunches.

**flocculus** n.; pl. **-li** [L. *floccus*, lock of wool] (ARTHRO: Insecta) In Hymenoptera, a tuft of hairs on the posterior coxa.

**flora** n. [L. *flos*, flower] The plants or plant life of a region. see **fauna**, **biota**.

**floricome** n. [L. *flos*, flower; *coma*, hair] (PORIF) An elaborately branched hexaster spicule.

**floscelle** n. [L. *flos*, flower] (ECHINOD: Echinoidea) A flower-like structure composed of bourrelets and phyllodes around the mouth.

**flosculus** n. [L. dim. *flos*, flower] (ARTHRO: Insecta) A small, crescent shaped, tubular anal organ with a central style, found in certain lantern flies (Fulgoroidea).

**fluted** a. [OF. *flaute*] A channeled or grooved area.

**fluviatile** a. [L. *fluviatilis*, of a stream] Living in rivers; growing near or inhabiting rivers or fresh water.

**fly-blow** (ARTHRO: Insecta) An egg or larva of flesh flies.

**focus** n.; pl. **foci** [L. *focus*, central point] A particular region of disease; a localized region.

**fold** n. [A.S. *folde*, a fold] 1. A doubling or folding. 2. (BRACHIO) A major external elevation of the valve surface, convex in transverse profile and radial from the umbo. 3. *a*. (MOLL: Bivalvia) A broad undulation in the shell surface which is directed radially or comarginally. *b*. (MOLL: Gastropoda) The spirally wound ridge on the interior of a shell wall. see **columellar fold**, **parietal fold**.

**folded membrane** (ARTHRO: Insecta) In Cicadidae, a specialized membranous area of the anterior wall of the ventral cavity of the sound-producing organ.

**foliaceous** a. [L. *folium*, leaf] Leaflike in appearance.

**foliate** a. [L. *folium*, leaf] Foliaceous; leaves, consisting of laminae or thin plates.

**folioles** a. [L. dim. *folium*, leaf] Having leaflike processes extending from a margin or protuberance.

**folium** n. [L. *folium*, leaf] (ARTHRO: Chelicerata) A pigmented

design or pattern on the abdominal dorsum of some spiders.

**follicle** n. [L. dim. *folllis*, windbag] Any small cavity, sac or tube.

**follicle cells** Epithelial cells surrounding the oocytes in the vitellarium, that in some species secrete on its external surface the chorion and perhaps function in a nutritional role.

**follicular** a. [L. dim. *folllis*, windbag] Pertaining to or having follicles.

**folliculate** a. [L. dim. *folllis*, windbag] Having, consisting of, or enclosed in a follicle or follicles.

**fontanelle, fontanel** n. [F. *fontannella*, little fountain] (ARTHRO: Insecta) In Isoptera, when present, a small circular or slit-shaped orifice of the frontal or cephalic gland near the center of the head, through which a liquid is emitted; a frontal pore.

**food** n. [A.S. *foda*, fodder] Any material that an organism obtains from the environment that yields energy or supplies matter for its growth.

**food bodies** (ARTHRO: Insecta) In Hymenoptera, secretions on the seeds and leaves of some plants used by ants as food.

**food chain** Food energy transferred from plants through a sequence of organisms in which each is food of a later member of the sequence.

**food channels** see **food meatus**

**food cycle** see **food web**

**food meatus** (ARTHRO: Insecta) In Diptera, a channel formed by the juxtaposition of the mouthparts of mosquitoes anterior to the cibarium.

**food web** Interlocking pattern of food chains in a community; typical food web composed of plants, herbivores, carnivores, omnivores, and detritus feeders.

**foot** n.; pl. **feet** [A.S. *foet*, foot] 1. An organ of locomotion or attachment. 2. (ARTHRO: Insecta) The tarsus. 3. (MOLL) *a.* The muscular undersurface of the body. *b.* In Bivalvia, the muscular, protrusible structure extending from the body

mid-line; used for burrowing. 4. (ROTIF) The foot or tail, with or without toes.

**foot-shaped loop** see **cubito-anal loop**

**foramen** n.; pl. **-ramina, -ramens** [L. *foramen*, hole] 1. A small opening, orifice or perforation through a bone, shell, membrane or partition. 2. (ARTHRO: Insecta) The opening of an insect cocoon. 3. (BRACHIO) A round opening at or near the beak facilitating the extension of the pedicle.

**foramen magnum** (ARTHRO: Insecta) The opening on the posterior side of the head, giving passage to the internal structures that extend from the head to the thorax; the occipital foramen.

**foramina** pl. **foramen**

**forceps** n.; pl. & sing. [L. *forceps*, pincers] 1. (ARTHRO) Hook or pincer-like processes terminating the abdomen of various arthropods which function as weapons in predation or for defense, for holding the mate during courtship, or even for cleaning the body or folding the wings. 2. (ARTHRO: Crustacea) The chelipeds. 3. (PORIF) Tongs-shaped.

**forcipate** a. [L. *forceps*, pincers] Bearing forceps or similar structures.

**forcipate mastax** (ROTIF) Slender, elongate trophi formed by rami and fulcrum (incus).

**forcipiform** a. [L. *forceps*, pincers; *forma*, shape] Forceps-shaped.

**fore** n. [A.S. *for*, fore] The front; the anterior.

**forebrain** n. [A.S. *for*, fore; *braegen*, brain] (ARTHRO: Insecta) The protocerebrum.

**foregut** n. [A.S. *for*, fore; *gut*, channel] The anterior portion of the alimentary tract, from the mouth to the midgut. see **stomodeum**.

**forehead** n. [A.S. *for*, fore; *heafod*, head] (ARTHRO: Insecta) The frons.

**foreleg** n. [A.S. *for*, fore; ON. *leggr*, leg] (ARTHRO: Insecta) One of a pair of legs on the prothorax.

**forfex** n. [L. *forfex*, shears] A pair of shears.

- forciform** a. [L. *forfex*, shears; *forma*, shape] 1. Scissor-shaped. 2. (ECHINOD: Asteroidea) The pedicellaria of certain starfish.
- forciculate** a. [L. dim. *forfex*, shears] Scissor-shaped; forked; furcate.
- form** n. [L. *forma*, shape] 1. An image or likeness. 2. A term for a single individual, phenon, or taxon. see **group**.
- formaldehyde** A colorless gas with a pungent odor; forms a 40% solution in water (formalin) which is used as a fixative, preservative and for hardening tissues; formalin.
- formalin** The 40% solution of formaldehyde in water; used as a preservative and for hardening tissues.
- formation** n. [L. *forma*, shape; -tion, process] A definite type of habitation, i.e., tundra, coniferous forest, prairie, rain forest, etc.
- formative cells** see **prohemocyte**
- formic** a. [L. *formica*, ant] (ARTHRO: Insecta) Of or pertaining to ants.
- formic acid** An organic acid naturally occurring in some hymenopteran insects.
- formicary** n.; pl. **-ies** [L. *formica*, ant] (ARTHRO: Insecta) An ant's nest or dwelling; an ant-hill; a formicarium.
- forment prep.** [A.S. *for*, fore; *efen*, even] Opposite to; facing; alongside.
- fornicated** a. [L. *fornix*, vault] Concave within, convex without; arched; vaulted.
- fornix** n.; pl. **fornices** [L. *fornix*, vault] 1. An arch or fold. 2. (ARTHRO: Crustacea) A ridge in the lateral part of the cephalon above insertion of antennal muscles in water fleas. 3. (MOLL: Bivalvia) The cavity on the inside under the hinge; the upper or convex shell of an oyster. **fornical** a.
- fossa** n.; pl. **-sae** [L. *fossa*, ditch] A depression or cavity.
- fosse** n.; pl. **-ses** [L. *fossa*, ditch] (CNID: Anthozoa) A groove between the collar and base of the capitulum in sea anemones.
- fossette** n. [L. dim. *fossa*, ditch] 1. A small, hollow, dimple or

- depression. 2. (MOLL: Bivalvia) Any socket; for example a socket for a cardinal tooth. 3. (PLATY: Cestoda) A ciliated, sensory pit.
- fossil** n. [L. *fossilis*, dug out] An organic relic of a previous geological period preserved by natural means in rock or softer sediments which afford information as to the character of the original organism.
- fossoria** n. [L. *fossor*, digger] 1. (ARTHRO: Insecta) Insects that burrow or dig, i.e., mole crickets, digger wasps, etc. 2. (NEMATA) The cheilostomal, outwardly movable teeth.
- fossorial** a. [L. *fossor*, digger] Fitted for or having the habit of digging.
- fossula** n.; pl. **-lae**; **fossule**, **fossulet** [L. dim. *fossa*, ditch] 1. A shallow fossa. 2. (ARTHRO: Insecta) Grooves on the head or sides of the prothorax, in which the antennae are concealed; a foveola. 3. (MOLL: Gastropoda) A shallow linear depression of the inner lip in some Cypraeidae.
- fossulate** a. [L. dim. *fossa*, ditch] Having slight hollows or grooves.
- founder cells** 1. Daughter cells from the early cleavages of the zygote, with potential to form the individual tissues and organs of the body. 2. (PORIF) Cells responsible for ray length during the secretion of calcareous spicules.
- founder principle/effect** The principle that when founders populate a new colony as an isolated entity, the population will contain only a small fraction of the total genetic variation of the parental population.
- fourth axillary** (ARTHRO: Insecta) In Hymenoptera and Orthoptera wings, an axillary sclerite between the posterior notal process and the third axillary sclerite.
- fovea** n.; pl. **-ae** [L. *fovea*, pit] A small depression, pit, pocket; a fossa. **foveolate** a.
- foveola** n.; pl. **-lae** [L. dim. *fovea*, pit] 1. An extremely small pit; a small fovea. 2. (ARTHRO: Insecta) A small pit into which the antennae are inserted.
- fractate** a. [L. *frangere*, to break] Displaced; bent at an angle.
- fractate antenna** (ARTHRO: Insecta) An antenna with one very

long joint with other annuli attached at angles.

**fracture** n. [L. *frangere*, to break] (ARTHRO: Insecta) The suture on the hemelytra of Heteroptera that separates the cuneus from the corium.

**fragile** a. [L. *frangere*, to break] Easily broken; delicate; thin and brittle.

**fragmentation** n. [L. *frangere*, to break] 1. Separated in parts or fragments. 2. Amitotic division. 3. (BRYO) Asexual production of a colony from a single or group of zooids from another colony.

**frame** n. [A.S. *framian*, fashion, prepare] (ECHINOD) A structure composed of pentagonal rings of small ossicles on the distal end of the tube feet.

**frass** n. [Ger. *fressen*, to devour] Insect larval excrement usually mixed with plant fragments.

**free** a. [A.S. *freo*, freedom] Unrestrained; motile; not attached.

**free edge** (ARTHRO: Crustacea) The line of contact of an ostracod shell between closed valves, except along hinge line marking the distal limit of the contact margin.

**free-living** Not attached or parasitic; capable of independent movement and existence. see **sessile**.

**free margin** (ARTHRO: Crustacea) All parts of an ostracod shell margin, except hingement.

**free mesodermal cell** see **hemocyte**

**free pupa** see **exarate pupa**

**free-swimming** Swimming about; not sessile.

**free-walled colony** (BRYO: Stenolaemata) A colony covered loosely by membranous exterior walls that are not attached at oral apertures.

**free-wax cell** (ARTHRO: Insecta) Cells found in the hemolymph of Aphididae and Coccoidea.

**frenate wing coupling** (ARTHRO: Insecta) Lepidopterous wing coupling with a well developed frenulum that engages with a catch or retinaculum on the underside of the fore wing, securing the wings together.

**frenulum** n.; pl. **-la** [L. dim. *frenum*, bridle] 1. (ARTHRO: In-

secta) The strong spine or group of bristles on the humeral angle of the hind wing, that projects beneath the fore wing, uniting them in flight; frenum. 2. (CNID) Gelatinous fold supporting the subumbrella of certain jellyfish. 3. (POGON) A v-shaped cuticular thickening held in an epidermal groove that functions as an adhesive device; also called bridle.

**frenulum hook** (ARTHRO: Insecta) A cuticular clasp (retinaculum) that functions in wing coupling.

**frenum** n.; pl. **frenna** [L. *frenum*, bridle] 1. Any fold of skin or tissue supporting an organ. 2. (ARTHRO: Crustacea) Membranous bilateral fold of the carapace of barnacles that holds eggs. 3. (ARTHRO: Insecta) The frenulum.

**frilled organ** (PLATY: Cestoda) A posterior attachment organ in the order Gyrocotylidea.

**fringe** n. [L. *fimbria*, border] 1. To furnish or adorn. 2. Hair, scales or other processes extending beyond the margin, usually of equal length. 3. (MOLL: Bivalvia) Periostracum extending passed the calcareous shell.

**fringed plates** see **pectinae**

**fringe scale** (ARTHRO: Insecta) Any scale in the wing fringe.

**frogga** see **articular pan**

**frondose** a. [L. *frondis*, of leaves] More or less divided into leaf-like expansions, as certain mollusks or bryozoans.

**frons** n.; pl. **frontes** [L. *frons*, fore part of anything, face] 1. (ARTHRO: Insecta) The head sclerite bounded by the post-frontal suture dorsally and the epistomal suture ventrally; the frons is delimited in various ways by different authors and in different insects and stages. see **front**, **facies**. 2. (SIPUN) see **cerebral organs**, **digitate processes**.

**front** n. [L. *frons*, fore part of anything, face] 1. The forehead; face. 2. (ARTHRO: Crustacea) In Decapoda, that part of a brachyuran carapace between the orbits. 3. (ARTHRO: Insecta) *a*. That portion of a cranium between the antennae, eyes, and ocelli; the frons. *b*. In ants, the facial area above the clypeus between the frontal carinae; dorsally it passes without definite boundary into the vertex.

**frontal** a. [L. *frons*, fore part of anything, face] 1. Of or pertaining to the front or forehead. 2. (BRYO) Pertaining to the exposed or orifice-bearing sides of the zooecial chambers.

**frontal appendages** (ARTHRO: Crustacea) In Anostraca, paired filaments arising from the bases of the antennae, but independent of them.

**frontal area** (ARTHRO: Insecta) The small median triangular plate of ants, on the anterior surface of the head, just above the clypeus.

**frontal band** (ARTHRO: Crustacea) A glandular adhesion organ of parasitic copepods, in the frontal region, used for attachment to the host.

**frontal bristles** (ARTHRO: Insecta) In Diptera, a row of bristles on each side of the boundary between the median, frontal vitta or plate and the eye orbit.

**frontal budding** (BRYO: Gymnolaemata) Buds arising from the frontal wall or associated structure.

**frontal carina** (ARTHRO: Insecta) A *carina*, or ridge, forming the medial boundary of the antennal fossa.

**frontal closure** (BRYO: Gymnolaemata) In Cheilostomata, calcified frontal and oral walls which were membranous in the autozoid originally.

**frontal condyle** (ARTHRO: Insecta) A process of the frons that articulates with the dorsal fossa of the mandible.

**frontal costa** (ARTHRO: Insecta) In Orthoptera, a prominent vertical ridge of the head; a carina.

**frontal crest** (ARTHRO: Insecta) In Hymenoptera, an elevation extending across the head above the antennal sockets.

**frontal dilators of the pharynx** (ARTHRO: Insecta) The muscles which run from the frons to the pharynx.

**frontal disc** (ARTHRO: Insecta) In larval Diptera, a projecting histoblast upon which develops the rudiment of an antenna.

**frontal eye** see **frontal organ**

**frontal eye complex** (ARTHRO: Crustacea) The eyes or reduced eyes innervated from the nauplius eye center. see

**organ of Bellonci, frontal organ.**

**frontal fissure** (ARTHRO: Insecta) In Diptera, the line extending from the crescent-shaped sclerite above the antennae to the border of the mouth.

**frontal ganglion** (ARTHRO: Insecta) The median ganglion above the esophagus, in front of the brain, connected by nerves to the tritocerebral lobe on either side.

**frontal gland** (ARTHRO: Insecta) In Isoptera, a large median gland beneath the integument of the head in certain soldier-termites, opening through the fontanelle or frontal pore, which produces secretions.

**frontalia** n. [L. *frons*, front] 1. (ARTHRO: Insecta) For Diptera, see frontal vitta. 2. (GNATHO) Paired sensory bristles on the anterior part of the head.

**frontal lobes** (ARTHRO: Insecta) 1. In Psyllidae, two lobes or protrusions divided by a suture in which an ocellus is situated. 2. In Formicoidea, lateral projection of the frontal carina.

**frontal lunule** (ARTHRO: Insecta) In Diptera, the lunar-shaped sclerite above the base of the antennae and below the frontal suture.

**frontal membrane** (BRYO: Gymnolaemata) In Cheilostomata, membrane of the frontal wall in autozooids.

**frontal orbit** see **facial orbit**

**frontal orbits** see **genovertical plates**

**frontal organ** (ARTHRO: Crustacea) *a.* Sensory cells on the anterior surface of the cephalon of malacostracans; the haft organ or frontal eye in non-malacostracans. *b.* The Bellonci organ of ostracods. see **organ of Bellonci, frontal eye complex, x-organ.**

**frontal plane** A plane or section parallel to the body main axis and at right angles to the sagittal plane; horizontal plane.

**frontal plate** (ARTHRO: Crustacea) In brachyuran Decapoda, a modified rostrum with a downward projecting process united with the epistome.

**frontal plate of the tentorium** (ARTHRO: Insecta) The plate formed by fused anterior arms of the tentorium.

**frontal pore** see **fontanelle**

**frontal/pretentorial pits** (ARTHRO: Insecta) The internal invaginations of the anterior arms of the tentorium.

**frontal region** (ARTHRO: Crustacea) The anteromedian part of a carapace including the rostrum and the region behind it.

**frontal ridge** (ARTHRO: Insecta) 1. An anteriorly directed ridge on the dorsal margin of the eye. 2. For mosquitoes, see postfrontal ridge.

**frontal sail** (MOLL: Gastropoda) In Prosobranchia, an erect transverse fold on the anterior part of the head which may be simple or formed into scallops, tubercles, or projections.

**frontal seta** 1. (ARTHRO: Diplopoda) One of a pair of setae on either side of the median line of the frontal surface of the head. 2. (ARTHRO: Insecta) One of two setae on the frons of caterpillars.

**frontal shield** (BRYO: Gymnolaemata) In Cheilostomata, the skeletal structure of the frontal or body wall that supports and protects the retracted organs of an autozoid.

**frontal stripe** (ARTHRO: Insecta) In Diptera, a membranous or discolored area on the middle front.

**frontal suture** (ARTHRO: Insecta) 1. One of two sutures arising at the anterior end of the coronal suture which extends ventrad toward the epistomal suture. 2. In Diptera, a suture shaped like an inverted "U", having the base crossing the face above the bases of the antennae, and the arms extending downward on each side of the face; a ptilinal suture.

**frontal tentacles** (MOLL: Gastropoda) In Opisthobranchia, tentacles just posterior to the mouth; cephalic tentacles.

**frontal triangle** (ARTHRO: Insecta) In holoptic flies, the triangle between the eyes and the antennae, the apex being above.

**frontal tubercle** see **nasus**

**frontal tuft** (ARTHRO: Insecta) In Hymenoptera, a group of elongate simple setae and fusiform scales arising at the interocular space and the adjacent portion of the vertex.

**frontal vesicle** (ARTHRO: Insecta) In Odonata, a protuberance

between the compound eyes, bearing the ocelli.

**frontal vitta** (ARTHRO: Insecta) In Diptera, an area on the head between the antennae and the ocelli; the frontalia.

**frontal wall** (BRYO) An external wall supporting the oral wall wholly or partly.

**frontoclypeal area** (ARTHRO: Insecta) The front of the head, that is divided by the epistomal sulcus (or suture) into the frons above and the clypeus below.

**frontoclypeal sulcus or suture** see **epistomal suture**

**frontoclypeus** n. [L. *frons*, forehead; *clypeus*, shield] (ARTHRO: Insecta) The line (sulcus or suture) between the combined clypeus and frons which is not externally visible.  
**frontoclypeal** a.

**frontogenal suture** (ARTHRO: Insecta) A more or less vertical suture on the front of the head, between the frons and the gena. see **subantennal suture**.

**frontolateral horn** (ARTHRO: Crustacea) In Cirripedia nauplii, a pair of tubular frontolateral extensions of cuticle.

**fronto-orbital bristles** (ARTHRO: Insecta) In Diptera, bristles on the front, next to the eyes.

**froth glands** (ARTHRO: Insecta) In nymphal Cercopidae, the modified Malpighian tubules.

**frugivorous** a. [L. *frux*, fruit; *vorare*, to devour] Feeding upon fruit.

**fry** n.; sing. & pl. [ME. *fry*, offspring] 1. Young or offspring. 2. The recently hatched brood of oysters.

**fugacious** a. [L. *fugere*, to flee] Having a tendency to disappear; not permanent; perishing early; lasting a short while.  
**fugaciously** adv.; **fugaciousness** n.

**fulcral** a. [L. *fulcrum*, support] Of or pertaining to a fulcrum.

**fulcral plates** (ARTHRO: Insecta) In aculeate Hymenoptera, see triangular plates; for Diptera see **clypeal phragma**.

**fulcrant trochanter** (ARTHRO: Insecta) A trochantin traversing the *femur*, but not intervening between it and the coxa.

**fulcrate mastax** (ROTIF) A mastax with an elongate *fulcrum*, having a pair of leaf-like manubria attached anteriorly.

**fulcro-cranial muscle** (ARTHRO: Insecta) 1. A muscle arising from the postoccipital phragma or ridge and inserted on the fulcrum in the thysanuran Lepismodes and mayfly nymphs. 2. In the blattoid *Periplaneta* and lower apterygotes, a muscle arising from each of the posterior tentorial arms.

**fulcrum** n.; pl. **fulcrums** [L. *fulcrum*, support] 1. Any structure that props or supports another. 2. (ARTHRO: Insecta) *a.* In Heteroptera, the trochantin. *b.* In lower hemimetabolous insects, a sclerotized fulcrum formed by two ligal sclerites joined proximally on the ventral surface of the hypopharynx. *c.* In Diptera and Hymenoptera, the horny part of the lingula. 3. (MOLL: Bivalvia) That portion to which the cartilage is attached; chondrophore. 4. (ROTIF) The unpaired trophus of the mastax.

**fulgid** a. [L. *fulgidus*, shining] Appearing red with bright metallic reflections.

**fulguration** n. [L. *fulgurare*, to flash] The act of flashing as lightning; to emit flashes.

**fuliginous** a. [LL. *fuligo*, soot] Of or pertaining to soot or smoke; having the color of soot; dark colored, sooty opaque brown.

**furtella** n. [L. dim. *furtura*, prop] (ARTHRO: Insecta) In Diptera, the aedeagal apodeme of male Tephritidae possessing a pair of lateral processes extending to the hypandrium.

**furtelliform** a. [L. dim. *furtura*, prop; *forma*, shape] (ARTHRO: Insecta) Having the furtella at least partially fused with the median internal surface of the hypandrium.

**furtura** n.; pl. **-ae** [L. *furtura*, prop] (ARTHRO: Insecta) In male Lepidoptera, a rectangular sclerite (paired) extending into the abdomen from sternite 9. see **suspensorium**.

**furturae of hypopharynx** (ARTHRO: Chilopoda) Two ventral plates posteriorly attached to the margin of the cranium, and mesally extended forward as a tapering arm against the side of the hypopharynx; hypopharyngeal supports.

**furtura inferior** (ARTHRO: Insecta) In male Lepidoptera, sclerotized structures situated on the ventral diaphragm, including the ventral part of the anellus and juxta.

**furtura penis** (ARTHRO: Insecta) In male Lepidoptera, the

sclerotized structures of the diaphragm, namely, the fultura inferior and the fultura superior.

**furtura superior** (ARTHRO: Insecta) In male Lepidoptera, sclerotized structures situated on the dorsal part of the diaphragm, including the dorsal part of the anellus and transtilla.

**fulvous** a. [L. *fulvus*, tawny yellow] Having low saturation and median brilliance; orange, reddish yellow, tawny, rust color or reddish brown.

**function** v. [L. *functio*, perform] The activity or action of any part of an organism. **functional** a.

**functional haplometrosis** (ARTHRO: Insecta) A colony in which an initial pleometrotic association of females undergoes a change, resulting in a haplometrotic society of the original females, presided over by one of them; functional monogyny. see **permanent haplometrosis, temporary haplometrosis**.

**fundament** n. [L. *fundamentum*, foundation] The primordium.

**fundatrigenia** n. [L. *fundare*, to found; Gr. *genos*, descent] (ARTHRO: Insecta) In Homoptera, the wingless, viviparous parthenogenetic Aphidae and Phylloxeridae females, the offspring of a fundatrix, that lives on the primary host.

**fundatrix** n.; pl. **-trices** [L. *fundare*, to found] (ARTHRO: Insecta) The wingless, viviparous, parthenogenetic female Aphidae, Phylloxeridae and Adelgidae that hatches from overwintered eggs and founds a new colony. see **fundatrigenia, alienicola, migrante, gallicola**.

**fundatrix spuria** see **agamic, migrante**

**fundus** n. [L. *fundus*, bottom] The base or bottom, as in the bottom of a hollow organ.

**fungicolous** a. [L. *fungus*, mushroom; *colare*, to inhabit] Living in or on fungi.

**fungiform** a. [L. *fungus*, mushroom; *forma*, shape] Mushroom-shaped.

**fungivorous** a. [L. *fungus*, mushroom; *vorare*, to devour] Feeding on or devouring fungus mycelium; mycetophagous; mycophagous.

**fungus garden** Fungi cultivated within the nest of higher termites or fungus ants for use as food. see **ambrosia**, **bee-bread**.

**fungus-growing beetle** (ARTHRO: Insecta) Any beetle that feeds on symbiotic fungi, i.e., ambrosia beetles, etc.

**funicular strand** (BRYO: Gymnolaemata) Tissue crossing all body cavities; in males and hermaphrodites produces sperm.

**funiculate** a. [L. *funiculus*, little cord] Having or forming a funiculus.

**funiculus, funicle** n.; pl. -li [L. *funiculus*, little cord] 1. (ARTHRO: Insecta) a. The middle antennal segments between the scape and the club. b. The main tendon of the abdomen. c. In Hymenoptera, the ligament connecting the propodeum to the petiole. 2. (BRYO) A strand of tissue that attaches the digestive tract to the body wall or communication pores, thus extending from zooid to zooid throughout the colony. 3. (MOLL: Gastropoda) A narrow ridge of callus spiraling from the upper lip into the umbilicus.

**funnel** n. [L. *infundibulum*, funnel] 1. (ANN: Oligochaeta) Internal opening of both male and female genital ducts. see **female and male funnel**. 2. (ARTHRO: Insecta) See peritrophic membrane. 3. (MOLL: Cephalopoda) a. A specialized siphon from the mantle cavity providing locomotion by propulsion. b. For Nautiloidea, see **hyponome**.

**funnel organ** (MOLL: Cephalopoda) A glandular structure on the dorsal side of the funnel, slightly behind the valve; Verrill's organ.

**funnel shaped** see **infundibulum**

**furca** n.; pl. -cae [L. *furca*, fork] 1. Any forked process. 2. (ARTHRO: Crustacea) The caudal furca; cercopod. 3. (ARTHRO: Insecta) a. The cercopods; the forked sternal process arising from the thoracic sternum of pterygote insects formed by the sternal apophyses, supported on a medium inflection; referred to as pro-, meso-, or metafurca. b. In Collembola, the modified abdominal jumping appendages. see **furcula**. c. In some male Lepidoptera, the sclerotized structure of the juxta. d. For furca of the labellum, see **la-**

**bellar sclerite**.

**furcae maxillares** see **superlinguae**

**furcal arms** see **sternal apophyses**

**furcal ramus** see **caudal ramus**

**furcapectinae** see **pectina**

**furcasternal suture** (ARTHRO: Insecta) In pterygote insects, the internal median longitudinal line formed at the point of meeting the mesopleurosternal ridges of opposite sides and confluent with the mesosternal ridge.

**furcasternum** n. [L. *furca*, fork; *sternum*, breast] (ARTHRO: Insecta) 1. In apterygote insects, that area of the thoracic sternum separated from the basisternum by the sternacosta. 2. In pterygote insects, the bases of the sternal apophyses form the *furca*, the sternacosta is lost, and the separation of the basisternum and furcasternum is usually obscure.

**furcate** a. [L. *furca*, fork] Forked; having two divergent branches from a common base.

**furcate plates** see **pectina**

**furcella** see **spina**

**furcilia** n. [L. dim. *furca*, fork] (ARTHRO: Crustacea) In Euphausiacea, the larval stage following the calyptopis (mysis type) with stalked and movable compound eyes and with thoracic and abdominal appendages; antennae not used for locomotion.

**furcina** n. [L. dim. *furca*, fork] (ARTHRO: Insecta) The outer surface of the sternum bearing an invaginated furca. see **furcasternal suture**.

**furcocercous cercariae** (PLATY: Trematoda) Cercariae with forked tails into which the body is not retractable; divided into several groups: 1. Bucephalus group (including gasterostomes). 2. Lophocercous group (apharyngeate, monostome cercariae). 3. Apharyngeate or ocellate group. 4. Pharyngeate, nonocellate group. 5. Suckerless apharyngeate group.

**furcocystocercous cercariae** see **cysticercariae cercariae**

**furcula** n.; pl. **-lae** [L. dim. *furca*, fork] (ARTHRO: Insecta) 1. The forked springing apparatus of springtails; furca. 2. In Hymenoptera, a small sclerite of the anterior sting base which depresses, raises and rotates the sting of bees. furcular a.

**furculate** a. [L. dim. *furca*, fork] Having a furcula.

**furrow** n. [A.S. *furh*, trench] A groove separating parts, divisions or segments of an invertebrate body.

**furrow spines** (ECHINOD: Asteroidea) Spines on the adambulacral plates that protect the ambulacral furrow.

**fuscous** a. [L. *fuscus*, dusky] Having a dusky or somber hue.

**fuscous** a. [L. *fuscus*, dsky] Brown or grayish black; dusky.

**fused** a. [L. *fundere*, to pour] Pertaining to being united, blended or run together.

**fused phobal mass** (ARTHRO: Insecta) In certain scarabaeoid larvae, the large, coalesced group of phobae located on each side of the pedium, slightly anterior to the tormae.

**fused-wall colony** see **fixed-wall colony**

**fusiform** a. [L. *fuscus*, spindle; *forma*, shape] 1. Spindle-shaped, tapering almost equally toward both ends. 2. (MOLL: Gastropoda) Of or pertaining to univalves having a long canal and an equally long spire, tapering from the middle toward both ends.

**fusion** n. [L. *fuscus*, spindle] A joining together of adjacent structures, parts or sclerites.

**fusion layer** (MOLL: Bivalvia) That part of the ligament secreted by the mantle.

**fusoid** a. [L. *fuscus*, spindle] Spindle-shaped; fusiform.

**fusulae, fusules** n.pl. [L. dim. *fuscus*, spindle] (ARTHRO) Minute upright cylinders with a tapering spine on the base of the spinnerets; the spinning tubes of the silk glands in various arthropods.

**fuscus amphidialis** see **sensilla pouch**