

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

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# Q

**Q technique** The analysis of association of pairs of taxa in a data matrix.

**quacking** a. [D. *kwakken*] (ARTHRO: Insecta) In Hymenoptera, sound made by new queens in the cells in response to "piping".

**quadrangle** n. [L. *quadrus*, fourfold; *angulus*, angle] 1. Any figure having 4 angles. 2. (ARTHRO: Insecta) In odonatan Zygoptera, a cell beyond the arculus. **quadrangular** a.

**quadrat** n. [L. *quadratus*, squared] A sample area of land for biotic study, usually 1 square meter.

**quadrate** a. [L. *quadratus*, squared] Having 4 sides in outline.

**quadrate plates** (ARTHRO: Insecta) In Hymenoptera, the reduced 9th abdominal tergite.

**quadricapsular** a. [L. *quadrus*, fourfold; *capsula*, little box] Having 4 capsules.

**quadricolumella** see **columella**

**quadridentate** a. [L. *quadrus*, fourfold; *dentatus*, tooth] Having 4 teeth or tooth-like processes.

**quadrifid** a. [L. *quadrus*, fourfold] Four rows; in 4 segment.

**quadrilateral** a. [L. *quadrus*, fourfold; *latus*, side] 1. Formed or bounded by 4 sides; 4 lines. 2. (ARTHRO: Insecta) In zygopterous Odonata, the discal wing cell.

**quadrimaculate** a. [L. *quadrus*, fourfold; *macula*, spot] Having 4 spots.

**quadripartite** a. [L. *quadrus*, fourfold; *partitus*, divided] In 4 parts.

**quadripinnate** a. [L. *quadrus*, fourfold; *penna*, feather] Having 4 feather-like branches or clefts.

**quadriprostatic** a. [L. *quadrus*, fourfold; Gr. *prostates*, one who stands first] (ANN) Having 4 prostates.

**quadriradiate** a. [L. *quadrus*, fourfold; *radius*, ray] (PORIF)

Having 4 rays; tetraxon, tetractine.

**quadrithecal** a. [L. *quadrus*, fourfold; Gr. *theke*, case] (ANN) Having 4 spermathecae.

**quadrivalve** a. [L. *quadrus*, fourfold; *valva*, fold] 4-valved.

**quartet** see **tetrad**

**quasisocial** a. [L. *quasi*, as if; *socius*, companion] (ARTHRO: Insecta) In Hymenoptera, females of the same generation forming a colony and cooperating in brood care.

**queen** n. [A.S. *cwen*, wife] (ARTHRO: Insecta) 1. A female member of the reproductive caste in semisocial and eusocial insects; may or may not differ morphologically from the workers. 2. In Formicidae, a fully developed reproductive female characterized by a generalized hymenopterous thorax and functional but deciduous wings; sometimes referred to as 'the female' of the colony.

**queen control** (ARTHRO: Insecta) In social Hymenoptera, inhibitory influence of the queen on the reproductive activities of workers and other queens.

**queen substance** (ARTHRO: Insecta) In Hymenoptera, pheromones released by the queen honeybee that attracts and controls the reproductive activities of workers and other queens; Trans-9-Keto-2-decanoic acid is the most potent component of the pheromone mixture.

**Quenstedt muscles** (MOLL: Bivalvia) Paired, small muscles anterior to the ctenidial elevator muscles of oysters.

**quick muscle** see **phasic muscle**

**quiescence** n. [L. *quiescere*, to become quiet] A condition of temporary cessation of development, or other activity, during which the animal requires little nourishment, but shows exterior signs of life; directly referable to environmental conditions.

**quiescent** a. [L. *quiescere*, to become quiet] 1. To become quiet. 2. (ARTHRO: Insecta) Applied to biological inactivity or prepupae and pupae with complete metamorphosis.

**quincunx** n.; pl. **-xes** [L. *quincunx*, arranged in diagonal rows, five-twelfths] 1. An arrangement of five things in a square, having one in each corner and one in the center. 2. (ANN)

Setaceous pattern. 3. (BRYO) Arrangement pattern of zooids. **quincuncial** a.

**quinone biochrome** (ARTHRO: Insecta) Quinone pigments: anthraquinones formed from the condensation of three benzene rings, and aphins, with a nucleus of seven condensed benzene rings. see **cochineal**.

**quinones** n.pl. [Ab.Am. *quinine*, bark of barks] 1. Various compounds formed from benzene and functioning in biological oxidation-reduction systems. 2. A hydrogen acceptor utilized in physiological experimentation.

**quinqüedentate** a. [L. *quinque*, five; *dens*, tooth] Having 5 teeth.

**quinquefarious** a. [L. *quinque*, five; *farius*, fold] Arranged in five rows, ranks, or columns.

**quinguelocular** a. [L. *quinque*, five; *loculus*, cell] Consisting of 5 cells, or 5 loculi.

## R

**race** n. [F. *race*; member of the same stock or lineage] A population or aggregate of populations inhabiting a defined geographical and/or ecological region possessing characteristic phenotypic and gene frequencies or features of chromosome structures that distinguish it from other such groups.

**racemose** a. [L. *racemus*, bunch] Bunch, as perhaps of grapes.

**racemose glands** (SIPUN) Glandular structures on each side of the rectum; function unknown; buschelformigen Körper.

**rachidian, rhacidian** a. [Gr. *rhachis*, backbone] (MOLL) The median or central tooth on the radula; the rachidian tooth.

**rachiform** a. [Gr. *rhachis*, backbone; L. *forma*, shape] Shaped like a rachis.

**rachiglossate, rhachiglossate** a. [Gr. *rhachis*, backbone; *glossa*, tongue] (MOLL) A radula with three longitudinal rows of teeth: one median (may be simple or have several cusps) and two lateral (rake-like with many cusps).

**rachis** n.; pl. **rachides, rachises** [Gr. *rhachis*, backbone] 1. Any of various axial structures. 2. (NEMATA) The central or axial chord in the ovary around which multiple rows of germinal cells are laid down.

**radial** a. [L. *radial*, ray] 1. Extending from a center toward the periphery like rays. 2. Pertaining to a radius.

**radial** n. [L. *radial*, ray] (ECHINOD) 1. In Crinoidea, any proximal, undivided plate or ray bearing an anal plate. 2. In Asteroidea, a prominent ossicle on the surface in line with the mid-line of the arm; part of the primary surface. 3. In Echinoidea, the ambulacrum.

**radial apophysis** (ARTHRO: Chelicerata) In Arachnida, a copulatory organ on the male palp.

radial canal (CNID: Scyphozoa) A canal in the mesoglea of a medusa running from the center to the edge, or at least in

part.

**radial cell** (ARTHRO: Insecta) A cell bordered anteriorly by a branch of the radial vein.

**radial gashes** (MOLL: Bivalvia) Radial, sharp-edged cuts found on the upper valve of Gryphaeidae.

**radial growth** (MOLL: Bivalvia) Growth direction outward from the beak to the shell edge; marked by the costa or other ornamentation.

**radial lirae** see **carapace costae**

**radial masses** (NEMATA: Adenophorea) In Enoplida, structures connecting the mandibular ring to the radial processes.

**radial-medial cross vein** (ARTHRO: Insecta) A wing cross vein between the lower first fork of the radial sector and the upper first fork of the medial vein.

**radial muscles** (NEMATA) The radial musculature of the nematode esophagus.

**radial plates** (ECHINOD: Crinoidea) Tegmental armature in the form of calyx plates in primitive stalked crinoids, oral to the basal plates.

**radial processes** (NEMATA: Adenophorea) In Enoplida, supporting structures of the onchial plate.

**radial ribs** (MOLL: Bivalvia) Ribs or bands of color meeting in a point at the umbones and diverging toward the ventral margin.

**radial sector** (ARTHRO: Insecta) The posterior wing branch of the two main branches of the radius.

**radial skeleton** (PORIF) Structural elements diverging from a central point toward the surface.

**radial symmetry** Having similar parts arranged around a common central axis. see **bilateral symmetry**.

**radial vein** (ARTHRO: Insecta) Often the heaviest vein of a wing, that forks near the middle of the wing, with the main part forming the radial sector vein.

**radial plate** (ECHINOD: Crinoidea) The calyx plate in the anal interradius in association with the anal tube.

**radiate** v. [L. *radius*, ray] To send out rays or direct lines from

a common point.

**radiate** a. [L. *radius*, ray] Radially symmetrical; radiating.

**radiate veins** (ARTHRO: Insecta) The anal veins.

**radicate** v. [L. *radicatus*, rooted] (MOLL: Bivalvia) Becoming permanently established by a root-like organ used for attachment.

**radicicolus** see **radicolous**

**radicle** n. [L. *radix*, root] (ARTHRO: Insecta) The base of the scape of the antenna. **radicular** a.

**radicola** n.; pl. **radicolae** [L. *radix*, root; *cola*, dweller] (ARTHRO: Insecta) In Homoptera, the root-infesting phylloxerans; radicolola.

**radicolous** a. [L. *radix*, root; *cola*, dweller] Inhabiting roots; radicolous.

**radii** see **rays**

**radiobiology** n. [L. *radius*, ray; Gr. *bios*, life; *logos*, discourse] The study of the effects of radioactivity on living organisms.

**radiocarbon** n. [L. *radius*, ray; *carbo*, coal] A radioactive isotope of carbon found naturally in the air and in organisms that is used to date fossil and subfossil remains; also used in physiological studies.

**radioecology** n. [L. *radius*, ray; Gr. *oikos*, house; *logos*, discourse] Radiation ecology; study of effect and trophic pathways of radioisotopes in communities.

**radioisotopes** n.pl. [L. *radius*, ray; Gr. *isos*, equal; *topos*, place] Unstable forms of elements that show radioactivity.

**radiole** n. [L. dim. *radius*, ray] 1. (ANN: Polychaeta) Feather-like head structures forming a crown, or modified into a long stalked knob (operculum); functioning in filtering particles for food. 2. (ECHINOD: Echinoidea) The spine of sea urchins.

**radiomimetic** a. [L. *radius*, ray; Gr. *mimos*, mime] Chemical agents causing effects similar to ionizing radiation in living systems.

**radioresistant** a. [L. *radius*, ray; *re-*, back; *stare*, to stand]

Organisms or tissues resistant to damage by radiation.

**radiosensitive** a. [L. *radius*, ray; *sentire*, to feel] Sensitive to radiation effects.

**radius** n.; pl. **radii** [L. *radius*, ray] 1. In radially symmetrical animals, the primary axis of symmetry. 2. (ECHINOD: Crinoidea) One of 5 reference planes passing through the polar or central axis and median line. 3. (ARTHRO) *a.* In Crustacea (sessile barnacles), the lateral part of a compartmental plate when marked off from the median triangular area by change in direction of growth lines. *b.* In Insecta, the third longitudinal wing vein.

**radix** n. [L. *radix*, root] 1. A primary source. 2. (ARTHRO: Chelicerata) In Arachnida, apophysis of male copulatory organ. 3. (ECHINOD: Crinoidea) The rootlike distal anchorage of the stem; holdfast.

**radula** n.; pl. **radulae** [L. *radula*, scrape] 1. (ARTHRO: Insecta) The raster. 2. (MOLL) A uniquely molluscan feeding rasplike organ, odontophore or lingual ribbon, armed with chitinous denticles, found in nearly all mollusks, except clams.

**radula sac** (MOLL) An evaginated pocket in the posterior wall of the buccal cavity containing on it's floor the radula. see **raster**.

**radulifer** n. [L. *radula*, scrape; *fero*, to bear] (BRACHIO) A hook-shaped or rodlike crura on the ventral side of the hinge plate, projecting toward the pedicle valve.

**raft** see **egg-rafts**

**rake** see **rastellum**

**ramal, rameal** a. [L. *ramus*, branch] Branching or branch-like.

**ramate** a. [L. *ramus*, branch] Branched.

**ramate mastax** (ROTIF: Bdelloidea) A stout mastax, with reduced fulcrum and manubria.

**ramellose** a. [L. dim. *ramus*, branch] Having small branches.

**ramellus** n. [L. dim. *ramus*, branch] (ARTHRO: Insecta) In Ichneumonoidea, the distal stump of the medial vein of the fore wings.

**ramet** n. [L. *ramus*, branch] An individual clone member.

**rami** pl. of **ramus**

**ramicorn** a. [L. *ramus*, branch; *cornu*, horn] (ARTHRO: Insecta) Having a branched antennae.

**ramicostellate** a. [L. *ramus*, branch; dim. *costa*, rib] (BRACHIO) Having a costellae on the shell resultant from branching.

**ramification** n. [L. *ramus*, branch; *ficare*, to make] Branching out in all directions; offshoot.

**ramiform** a. [L. *ramus*, branch; *forma*, shape] Resembling or shaped like branches.

**ramify** v.; **-fied**; **-fying** [L. *ramus*, branch; *ficere*, to make] To send forth outgrowth or branches.

**rami valvularum** see **ramus**

**ramose** a. [L. *ramosus*, branching] 1. Branching, having lateral divisions full of branches; branch-like; ramified. 2. (ARTHRO: Insecta) In immatures, setae with branches, usually originating at the base.

**ramp** n. [OF. *ramper*, to climb] (MOLL: Gastropoda) Abapically inclined flattened band on the shell surface, limited abaxially by a ridge or angulation.

**ramus** n.; pl. **rami** [L. *ramus*, branch] 1. A branch or outgrowth of a structure. 2. (ANN) The notopodium and neuropodium that form the two parts of a parapodium; the two rami. 3. (ARTHRO: Crustacea) The flagellum. 4. (ARTHRO: Insecta) *a.* One of paired structures linking valvulae and valvifers of the eighth and ninth abdominal segments; rami valvularum. *b.* In Collembola, the distal portions of the corpus. 5. (ROTIF) One of two usually thick, triangular pieces extending from the fulcrum of the mastax.

**random fixation** The complete loss of one allele, with fixation of the other, in a population owing to accidents of sampling.

**ranking** v. [OF. *ranc*, row] The appropriate placement of a taxon in the hierarchy of categories.

**rapacious** a. [L. *rapax*, grasping] Subsisting on prey; predacious; voracious; predatory.

**raphe** see **rhaphe**

**raphide** n. [Gr. *rhaphidos*, needle] (PORIF: Desmospongia) A thin diactinal microscleere lacking ornamentation.

**raptorial** a. [L. raptor, robber] Fitted for grasping prey.

**raptorial claw** 1. (ARTHRO: Crustacea) The toothed dactyl curved backward on the propodus. 2. (ARTHRO: Insecta) In Mantids, the spinose tibiae and femur that produce the hook.

**rasorial** a. [L. *rasor*, scraper] Adapted for scratching.

**rasp** n. [OF. *rasper*, to scrape] 1. (ARTHRO: Crustacea) One or more rows of chitinous plates or scales on the pereopodal or uropodal surface segments. 2. (ARTHRO: Insecta) A roughened surface for the production of sound by friction. see **strigulating organs**.

**Rassenkreis** n. [Ger. *Rasse*, race; *Kreis*, circle] Polytypic species; rheogameon. see **circular overlap**.

**rastellum** n. [L. dim. *rastrum*, rake] (ARTHRO: Chelicerata) In Arachnida, a structure on the chelicera bearing numerous tooth-like projections, stout and rigid spines, or seta; the paturon.

**rastellus** n. [L. dim. *rastrum*, rake] (ARTHRO: Chelicerata) In Arachnida, the teethlike projections on the chelicera borne by the rastellum or paturon.

**raster** n.; pl. **rastri** [L. *rastrum*, rake] (ARTHRO: Insecta) A complex of bare areas, hairs and spines on the ventral surface of the last abdominal segment, in front of the anus in Scarabaeoidea; comprised of septula, palidium, teges, tegillum in some groups, and campus in Coleoptera.

**rastrate** a. [L. *rastrum*, rake] Having longitudinal scratches over the surface.

**rataria larva** (CNID: Hydrozoa) In some Siphonophora, free-swimming *larva*, hourglass in shape, with an anterior disc collar; develops from the conarium larva.

**ratite** a. [L. *rat*, raft] Lacking a keel; a smooth ventral somite; lacking ridges or raised lines. see **carinate**.

**rat-king cercariae (rattenkonig)** (PLATY: Trematoda) Marine cercariae that occur in masses, with the tail tips attached to a protoplasmic mass.

**rat-tailed larva/maggots** (ARTHRO: Insecta) In Diptera, Syrphidae larva having a long flexible respiratory tube extending from the end of the body.

**ray** n. [L. *radius*, ray] 1. One of a number of fine lines radiating from a center. 2. Each arm of the triradiate lumen of nematodes and other pseudocoelomates. 3. A division of a radiate animal.

**reafference** n. [L. *re*, again; *afferre*, to bring] Sensory impulses caused by an animal's movements relative to the environment. see **afference**.

**reborded** a. [F. *rebord*, rim] (ARTHRO: Chelicerata) In Acarina, pertaining to the distal thickened and strengthened end of the labium.

**recapitulation theory** The theory that ontogeny recapitulates phylogeny.

**recent** n. [L. *recens*, new] Taxa still in existence.

**receptacle** n. [L. *recipere*, to receive] Any organ that receives and stores; acting as a repository.

**receptaculum** n. [L. *recipere*, to receive] A receptacle.

**receptaculum seminalis/seminis** see **seminal receptacle**

**receptor** n. [L. *recipere*, to receive] A structure specialized for receiving a particular kind of stimulus.

**recessive allele** 1. The failure of an allele to affect the phenotype of the heterozygote. 2. A term applied to organisms displaying recessive characters. see **double recessive, dominant allele**.

**recessive character** A character of one parent that manifests itself in the offspring only if it is homozygous in the offspring.

**reciprocal feeding** Trophallaxis.

**recline** a. [L. *re*, back; *clinare*, to lean] Inclined backward.

**reclivous, reclivate** a. [L. *re*, back; *clivus*, slope] 1. Having the form of a sigmoid curve; a convex and concave line. 2. (ARTHRO: Insecta) An insect wing vein having the front end farther from the wing base than the hind end. see **verticle, inclivous**.

**recombinant** a. [L. *re*, back; *combinere*, to join] Organisms or cells arising by genetic recombination.

**recombinant DNA** DNA produced by recombination, particularly DNA produced from 2 different species by techniques of genetic engineering.

**recondite** a. [L. *reconditus*, put away, hidden] Concealed; remote from ordinary or easy perception; hidden.

**recrudescence** n. [L. *recrudescere*, to become raw again] A new outbreak after a period of abatement or inactivity. **recrudescent** a.

**recruitment trail** (ARTHRO: Insecta) In social Hymenoptera, an odor trail laid by a single scout worker to recruit nest-mates to an area where many workers are needed.

**rectal** a. [L. *rectus*, straight] Of or pertaining to the rectum.

**rectal caecum** (SIPUN) A small blind tube present on the posterior or rectal section of the gut; function unknown.

**rectal gills** (ARTHRO: Insecta) In anisopteran Odonata nymphs, an elaborate system of folds in the wall of the rectum, the latter chamber forming the branchial basket.

**rectal glands** A term loosely applied to numerous glands adjacent to or associated with the anus; glands which often secrete either a lubricant, silk-gum, or other specialized material such as a gelatinous matrix for the protection of eggs.

**rectal matrix glands** see **matrix glands**

**rectal muscles** (NEMATA) Specialized muscles that function to open and close the anal opening.

**rectal pad** (ARTHRO: Insecta) Columnar epithelium (usually 6) extending longitudinally along the rectum, important in the reabsorption of water, salts and amino acids from the urine.

**rectal papillae** (ARTHRO: Insecta) In some Diptera, a papilliform modification of the rectal pads projecting into the rectum enclosing intercellular sinuses separated from the gut lumen by cell junctions and connected indirectly with the hemocoel.

**rectal pouch** 1. (ARTHRO: Insecta) *a.* In some Coleoptera, an

enlarged anterior part of the rectum opening into the hind-gut; function unknown. *b.* In Isoptera, an enlargement of the colonic region of the hind gut that acts as a repository for symbiotic protozoa. 2. (BRYO) That part of the digestive tract between the pylorus and anus.

**rectal tracheal gills** (ARTHRO: Insecta) In some nymphs of Odonata, lamellate structures in the rectum supplied with tracheae and tracheoles.

**rectal valve** (ARTHRO: Insecta) A circular or lobate fold of the hind intestine separating the distal intestine and rectum.

**rectate** a. [L. *rectus*, straight] Straight.

**rectification** n. [L. *rectus*, straight; *facere*, to make] A property of some cell membranes that allow impulses to pass more easily in one direction than in the opposite direction, resulting in polarized transmission of nervous impulses.

**rectigrade** a. [L. *rectus*, straight; *gradus*, step] 1. Walking in a straight line. 2. (ARTHRO: Insecta) Pertaining to larvae with 16 legs that progress with a straight body, as opposed to geometrid.

**rectilinear** a. [L. *rectus*, straight; *linea*, line] Straight; formed in or bound by straight lines.

**rectimarginate** a. [L. *rectus*, straight; *margo*, edge] (BRACHIO) Having a straight anterior commissure.

**rectum** n. [L. *rectus*, straight] The posterior ectodermal portion of the enteron ending at the anus, in some groups this includes the entire proctodeum. **rectal** a. see **proctodeum, hind-gut**.

**recumbent** a. [L. *recumbere*, to lie down] Reclining.

**recumbent spines** (BRACHIO) Curved spines laying at an angle of less than 45° to the surface of the shell.

**recurrent** n. [L. *recurrere*, run again] Returning; reappearing at intervals; recurrent species.

**recurrent collateral** A collateral axon that turns back to end near the cell body or a similar one.

**recurrent nerve** (ARTHRO: Insecta) A nerve extending posteriorly from the frontal ganglion along the mid-dorsal line of the esophagus, passing under the brain and then expand-

ing into a hypocerebral ganglion.

**recurrent vein** (ARTHRO: Insecta) 1. In Hymenoptera, one of two transverse veins immediately posterior to the cubital vein. 2. In Neuroptera, A vein at the base of the wing between costa and subcosta, extending obliquely from the subcosta to the costa.

**recurved** a. [L. *re*, back; *curvus*, bent] 1. Bent upward or backward; curved or bent back or down. 2. (ARTHRO: Chelicerata) In Arachnida, lateral eyes farther back than the median eyes. see **procured**.

**recurved ovary** see **reflexed ovary**

**redia** n.; pl. **rediae** [NL. after Francesco Redi, naturalist] (PLATY: Trematoda) In Digenea, a larval produced by asexual reproduction within a sporocyst or mother redia.

**reflected** a. [L. *re*, again; *flectere*, to bend or turn] 1. Turned back on itself; turned from the general course of the structure. 2. (MOLL: Gastropoda) Referring to the outer and columellar lips.

**reflex** a. [L. *re*, back; *flexus*, bend] A simple unconditioned response.

**reflex arc** A series of neurons transmitting excitation from a receptor through the central nervous system to an effector.

**reflex bleeding** (ARTHRO: Insecta) Blood as well as other fluids discharged through various body articulations; functioning in protection from predators.

**reflexed ovary** Turned back upon itself, generally at the junction of the ovary and oviduct; bent abruptly back.

**reflex immobilization** see **hypnosis, stereokinesis**

**refractive** a. [L. *re*, back; *frangere*, break] To turn from a direct course; turned aside.

**refractory** n. [L. *re*, back; *frangere*, break] 1. Not readily infectible; not amenable to therapy. 2. Unresponsive; the intermission after excitation during which repetition of the stimulus fails to induce a response in nerves.

**refrangent** a. [L. *re*, back; *frangere*, to break] Refractive; to deflect rays of light.

**refugium** n.; pl. **-ia** [L. *re*, back; *fugere*, flee] An area that has escaped the great changes of the region as a whole, as unglaciated mountain tops in an ice age.

**regeneration** n. [L. *regenerare*, to regenerate] The replacement of a part or parts lost through mutilation or otherwise.

**regenerative budding** (BRYO: Gymnolaemata) Budding inside a broken zooid.

**regenerative cells** (ARTHRO: Insecta) Cells of the stomach (ventriculus) that may be singly, in pairs beneath the columnar cells or grouped into clusters (nidi) or arranged in crypt-like outpocketings; functioning in renewal of other epithelial cells when destroyed by secretion or degeneration during molting or pupation.

**regression** n. [L. *re*, back; *gradi*, to step] 1. Regressive evolution. 2. A statistical method of comparing paired observations.

**regressive character** A character being reduced or lost in the course of phylogeny.

**regressive evolution** The appearance of characters in a taxon that are usually considered primitive.

**regressive molting** (ARTHRO: Insecta) In Isoptera, reversal during metamorphosis, when they are already in the process of developing into a particular caste, back to a less differentiated stage.

**regularization** (ANN) Anatomical adjustments involved in reducing the asymmetry due to unilateral splitting of mesoblastic somites.

**regular triact** (PORIF) A megasclere spicule with three equal rays separated by angles of 120 degrees.

**regulator gene** A gene that controls the action of other genes through curtailing the rate of synthesis of the products of other distant genes.

**reinfection** n. [L. *re*, again; *inficere*, to make] A second infection by the same microorganism after recovery from or during the course of a primary infection.

**relic** n. [L. *reliquia*, remnant] A present nonfunctional structure

that was originally useful; an isolated remnant of a once widespread population.

**remiform** a. [L. *remus*, oar; *forma*, shape] Oar-like in shape.

**remigium** n. [L. *remigare*, to row] (ARTHRO: Insecta) The wing area anterior to the claval furrow, in both fore and hind wings; if claval furrow is indistinct, may be described as forward of the posterior cubitus. **remigial** a.

**remigrant foramen** (BRACHIO) The pedicle opening moving dorsally after an initial movement toward the ventral beak.

**remiped** a. [L. *remus*, oar; *pes*, foot] Having oar-shaped feet; adapted for rowing.

**remotion** n. [L. *re*, again; *motus*, move] (ARTHRO: Insecta) In leg movements, the corresponding movement of the coxa.

**renal** a. [L. *renis*, kidneys] Pertaining to a kidney.

**renal appendage** (MOLL: Cephalopoda) A sacculate organ functioning in providing blood pressure to carry blood through the gills.

**renal cells** Nephrocytes.

**renal sac** (MOLL: Cephalopoda) One of four organs of the nephridium that receives pericardial filtrate via the renopericardial canal and secretions from the large renal appendages.

**renette** a. [L. dim. *ren*, kidney] (NEMATA) The ventral excretory gland cell(s).

**reniform** a. [L. dim. *ren*, kidney; *forma*, shape] Kidney-shaped.

**reniform spot** (ARTHRO: Insecta) In Noctuidae, a kidney-shaped spot at the end of the discal cell.

**renopericardial canal** (MOLL: Cephalopoda) Ciliated canal connecting the metanephridium with the pericardial cavity.

**renopericardial pore** see **nephrostome**

**repagula** n.pl.; sing. **-um** [L. *repagulum*, bar] (ARTHRO: Insecta) In neuropteran Ascalaphidae, modified eggs that often fence the normal eggs, possibly guarding them from the attacks of predacious enemies.

**repand** a. [L. *re*, back; *pandus*, bent] Wavy, with alternate

segments of circles and minute angles; having a wavy or uneven outline; sinuate.

**repent** a. [L. *repens*, creeping] Appearing as if creeping or crawling.

**repetition-molt** (ARTHRO: Chelicerata) A molt that results in no change in characters of form or size. see **growing molt**.

**replacement name** A substitute name.

**replacement reproductive** see **supplementary reproductive**

**replete** n. [L. *repletus*, filled] (ARTHRO: Insecta) In Hymenoptera, individuals of certain ant species that are specially adapted with distended abdomens for the storage of honey; a living honey cask; plerergate.

**replicate** n. [L. *re*, back; *plicare*, to fold] Doubled back over on itself.

**reproduction** n. [L. *re*, back; *producere*, to lead forth] The process of perpetuating the species from generation to generation.

**reproductive isolation** see **isolate**

**repugnatorial** a. [L. *repugnans*, offensive] Repellent; offensive as to drive away.

**repugnatorial glands** 1. (ARTHRO: Diplopoda) Stink glands. 2. (ARTHRO: Insecta) Glands secreting noxious liquids or vapors to repel antagonists.

**reservoir** n. [L. *re*, back; *servo*, keep] A case or cavity for storage of certain fluids or secretions. see **ampulla**.

**reservoir host** A definitive host in which the infection usually resides in nature.

**resilifer** n. [L. *resilire*, to leap back; *fero*, bear] (MOLL: Bivalvia) A Modification of a bivalve shell to which the resilium is attached.

**resilin** n. [L. *resilire*, to leap back] (ARTHRO: Insecta) A colorless, rubber-like protein found in elastic and extensible cuticle of insects that stores energy for tension release to restore original position.

**resilium** n. [L. *resilire*, to leap back] (MOLL: Bivalvia) The internal ligament, irrespective of composition; in oysters rests in a subtrigonal central socket or fossa.

**resinous** a. [Gr. *resina*, resin] Having the appearance of rosin; clear brownish yellow.

**resonator** n. [L. *re*, again; *sonare*, to sound] (ARTHRO: Insecta) A structure functioning to intensify or activate sound; a thin vibrating plate or lamella.

**resonator ridge** (ARTHRO: Insecta) In Diptera, a ridge on the hind femur that rubs against the stridulatory file to produce sounds.

**resorption** n. [L. *re*, again; *sorbere*, drink in] (MOLL: Gastropoda) The removal of a previously formed shell by action of the living gastropod.

**respiration** n. [L. *re*, back; *spirare*, to breathe] The intake of oxygen and giving off of carbon dioxide.

**respiratory funnel** (ARTHRO: Insecta) In Diptera, a distinctive chitinous funnel attached to the host tracheal system so that encapsulation does not impair the respiration in older tachinid larvae.

**respiratory horn** (ARTHRO: Insecta) 1. In Diptera, paired prothoracic protuberances on the aquatic pupae of most Culicidae and Ceratopogonidae; respiratory trumpet. 2. A sharply pointed post-abdominal siphon in some aquatic insect pupae that are thrust into the aerenchyma of aquatic plants.

**respiratory movements** Movements designed to increase the supply of oxygen or disperse carbon dioxide, such as abdominal movements in insects or undulations of aquatic oligochaetes.

**respiratory siphon** (ARTHRO: Insecta) In Diptera, the caudal breathing tube of culicid larvae.

**respiratory tree** (ECHINOD: Holothuroidea) Branched cloacal tubules thought to have a respiratory function.

**respiratory trumpet** see **respiratory horn**

**response** n. [L. *responsum*, reply, answer] A change of activity due to change of external or internal conditions. **respon-**

**siveness** a. see **stimulus**.

**restiform** a. [L. *restis*, rope; *forma*, form] Shaped like a rope or cord; prominent cordlike masses.

**resting eggs** (ROTIF: Monogononta) Fertilized mictic eggs of certain Ploima produced in response to environmental factors or vitamin E; thick shelled eggs resistant to drying and other adverse environmental conditions, that always develop into amictic females.

**resting stage** see **growth stage**

**restitution** n. [L. *re*, back; *statuare*, to put] Rejoining broken chromosomes, thereby restoring prebreakage structure.

**restitution nucleus** In either meiosis or mitosis, a nucleus with double the normal number of chromosomes due to non-disjunction.

**resupinate** a. [L. *resupinare*, to bend back] Having the appearance of being inverted, reversed, or upside down.

**rete** n. [L. *rete*, net] 1. A net or network; a plexus. 2. (ACANTHO) A thin-walled tubular network between the longitudinal and circular muscle layers, or inside the longitudinal muscles. 3. Any structureless membrane or layer.

**retacious** a. [L. *rete*, net] In the form of a network.

**reticular membrane** (PORIF: Hexactinellida) A membrane formed by the fused bases of the choanocytes.

**reticulate** a. [L. *rete*, net] Forming a network of obliquely intersecting linear ridges or lines; a network; cancellated. see **retiform**.

**reticulate evolution** Evolution dependent on repeated intercrossing between a number of lines.

**reticulosome** n. [L. dim. *rete*, net; Gr. *soma*, body] Cytoplasmic inclusion thought to be involved in membrane formation.

**reticulum** n.; pl. **reticula** [L. dim. *rete*, net] A network of anastomosing fibers or tubules.

**retiform** a. [L. *rete*, net; *forma*, form] Having the form of a network; composed of crossing lines.

**retina** n. [L. *rete*, net] The receptive apparatus of an eye.

**retinal** a.

**retinaculum** n.; pl. **-la** [L. *retinaculum*, holdfast] 1. A connecting or retaining band. 2. (ACANTHO) Muscular sheath of a nerve. 3. (ARTHRO: Crustacea) In Malacostraca, small hook at the tip of the appendix interna, interlocking the right and left pleopods; cincinnulus. 4. (ARTHRO: Insecta) *a.* In Lepidoptera, the frenulum; wing coupling device. *b.* In Collembola, hamula that holds the furcula in place in springtails. *c.* In Hymenoptera, the ring that prevents the sting from being darted out too far. *d.* In Coleoptera larvae, a fixed sclerotized, tooth-like structure on the mandible.

**retinal cell** The photosensitive neurosensory cells.

**retinal pigment cells** (ARTHRO: Insecta) Pigment cells in the retinal region of the eye. see **accessory pigment cells**, **corneal pigment cells**, **retinular pigment cells**.

**retinula** n.; pl. **-lae** [L. dim. *rete*, net] 1. Sensory neuron in the eye. 2. (ARTHRO) A group of cells and their associated rhabdoms that are surrounded by a sheath of pigment cells containing dense granules of red, yellow or brown pigments making up each ommatidium of the arthropod compound eye. **retinular** a.

**retinular pigment cell/basal pigment cell** (ARTHRO: Insecta) When present, a second sleeve of pigment cells that surrounds the proximal end of the retinulae. see **corneal pigment cells**, **accessory pigment cells**.

**retort-shaped organs** (ARTHRO: Insecta) In Hemiptera, oval areas of glandular tissue at the enlarged proximal ends of both pairs of the mouth stylets, that secrete a new stylet at each nymphal molt.

**retractile** a. [L. *retractus*, withdrawn] Capable of being drawn inwards; having the tendency to retract.

**retractive** see **opisthocline**

**retractor** n. [L. *re*, back; *trahere*, to pull] Any muscle that serves to return an organ to its original position. see **protractor muscle**.

**retractor gubernaculi** see **gubernaculum**

**retractor preputii** see **hood retractor**

**retractor spiculi** (NEMATA) Paired spicular muscles, each containing a nucleus in the sarcoplasm, arising from the spicular head and extending to the hypodermis in the region of the lateral chords.

**retroarcuate** a. [L. *retro*, backwards; *arcuare*, to bow] Curved backwards.

**retrobursal** a. [L. *retro*, backwards; *bursa*, purse] (PLATY: Turbellaria) In Tricladida, having the bursal stalk short, so that the bursa lies behind the penis; retrobursalia. see **probur-sal**.

**retrocerebral endocrine system** (ARTHRO: Insecta) System comprised of corpora allata, corpora cardiaca and ventral gland.

**retrocerebral organ** (ROTIF) A small glandular organ, attached to the epidermis above and behind the brain, comprised of the retrocerebral sac and the subcerebral glands; function unknown.

**retrocerebral pore** (CHAETO) A pore on the dorsal surface behind the brain where the retrocerebral organs open.

**retrocerebral sac** 1. (CHAETO) A pair of sacs imbedded in the posterior part of the cerebral *ganglion*, separated by a membrane but connected by a nerve proximally, and opening by means of the retrocerebral pore. 2. (ROTIF) A forked duct opening on the apical field, often on a single or paired papilla; part of the retrocerebral organ.

**retrocession** n. [L. *retro*, back; *cedere*, to go] The act of retreating; to move backward.

**retrocurrent** see **opisthocline**

**retrofection** see **autoinfection**

**retroflexed** a. [L. *retro*, backwards; *flectere*, to bend] Bending in different directions; bent or turned backwards.

**retrogressive development** Developmental trend in evolution resulting in simplification of an organism, usually through the complete or partial loss of one or more structures; regressive development.

**retorse** a. [L. *retorsus*, turned or bent backwards] Turned, bent, or directed backward; backward projecting. see **an-**

**trorse, detrorse.**

**retrovesicular ganglion** (NEMATA) The largest *ganglion*, usually posterior to the excretory pore.

**retuse** a. [L. *retusus*, blunt] Terminating in a round end or apex with a slight depression.

**reunion** n. [L. *re*, back; *unire*, to make one] Rejoining of broken chromosomes with structural changes.

**reversed** a. [L. *reversare*, to turn about] 1. Contrary to the usual. 2. (ARTHRO: Insecta) Deflexed wings; margins of hind wings projecting beyond those of the fore wings. 3. (MOLL) A spiral shell turned in the opposite direction; sinistral. see **dextral**.

**reverse mutation** Heritable mutation in a gene that returns it to its original function.

**reversion** n. [L. *re*, back; *vertere*, to turn] A genotypic or phenotypic return to the wild-type of a mutant, may be either partial or complete. **revertant** a.

**reviviscence** n. [L. *re*, back; *vivere*, to live] The act of reviving; awakening from hibernation, torpor or dessication. **reviviscent** a.

**revolute** a. [L. *re*, back; *volutus*, turn around] Curled or rolled backwards, or downwards. see **involute**.

**revolving** a. [L. *re*, back; *volutus*, turn around] 1. To come around again. 2. (MOLL) Spiral lines on a shell that run parallel with the sutures.

**rhabd** n. [Gr. *rhabdos*, rod] (PORIF) A megasclere triaene with an odd, generally straight ray.

**rhabdiferous cell** (PORIF) A cell that secretes mucopolysaccharide.

**rhabdion** n. [Gr. *rhabdos*, rod] (NEMATA) That cuticularized portion of the wall of the stoma. see **cheilorhabdions**, **prorhabdion**, **mesorhabdions**, **metarhabdions**, **telorhabdions**.

**rhabdites** n.pl. [Gr. *rhabdos*, rod] 1. Rod or blade-like processes projecting from the epidermis. 2. (PLATY: Turbellaria) Straight or slightly curved rods in the epidermis and subepidermis.

**rhabditiform** a. [Gr. *rhabdos*, rod; L. *forma*, shape] Having the shape of a rod.

**rhabditoid** a. [Gr. *rhabdos*, rod] (NEMATA: Secernentea) Having characters of free-living bacterial feeding nematodes in the genus *Rhabditis*.

**rhabditoid bursa** see **bursa**

**rhabditoid larva** (NEMATA) A bacterial feeding larva among free-living or parasitoid forms, in which the esophagus is divided into *corpus*, isthmus and a posterior valved bulb.

**rhabdocrepid** a. [Gr. *rhabdos*, rod; *krepis*, boot] (PORIF) A desma deposited on a diactinal monaxon.

**rhabdoid** n. [Gr. *rhabdos*, rod; *eidōs*, like] 1. Rod-like; any rod-shaped body. 2. (CNID) Nematocysts that open at the tip with a definite cylindrical hempe. 3. (PLATY: Turbellaria) A group of epidermal and subepidermal inclusions (rhabdites, rhammites, and chondrocysts), consisting of a ridged hull filled with a semifluid material.

**rhabdom** n. [Gr. *rhabdos*, rod] (ARTHRO) A rodlike light-sensitive structure formed by rhabdomeres in the ommatidium of a compound eye.

**rhabdome** n. [Gr. *rhabdos*, rod] (PORIF) A greatly elongated ray of a tetraxon spicule.

**rhabdomere** n. [Gr. *rhabdos*, rod; *meros*, part] (ARTHRO) The receptive area of a retina cell.

**rhabdus** see **diactinal monaxon**

**rhachidian** see **rachidian**

**rhachiglossate** see **rachiglossate**

**rhagon** n. [Gr. *rhax*, grape] (PORIF) A larval stage of a sponge, conical in shape and tapering from a broad base to the summit bearing the single osculum.

**rhammites** n.pl. [Gr. *rhamma*, thread] (PLATY: Turbellaria) Long, slender, sometimes sinuous rhabdoids, longer than the thickness of the epithelium.

**rhamphoid** a. [Gr. *rhamphos*, beak; *eidōs*, form] Beak-shaped.

**rhaphe** n. [Gr. *rhaps*, rod] (ARTHRO: Insecta) A sclerotic bar

on the dorsal surface of the silk press of caterpillars.

**rhegmatocyte** see **spherule cell**

**rhegmatocytoid** see **spherule cell**

**rheogameon** n. [Gr. *rheein*, to flow; *gamos*, marriage; *on*, being] Rassenkreis; polytypic species.

**rheophile** a. [Gr. *rheein*, to flow; *philos*, loving] Living in rivers and streams; reophilic. **rheophily** n.

**rheoreceptor** n. [Gr. *rheein*, to flow; L. *recipere*, to receive] A sensory structure that signals the presence or strength of water currents.

**rheotaxis** n.; pl. **-taxes** [Gr. *rheein*, to flow; *taxis*, arrangement] Tactic response due to stimulation from moving fluid; rheotropism. *a.* Positive rheotaxis: migrating against the current of moving fluid. *b.* Negative rheotaxis: Moving with the fluid. **reotactic** a.

**rhinarium** n.; pl. **-ia** [Gr. *rhinos*, nose; *-arium*, place] (ARTHRO: Insecta) In Hemiptera, usually round or oval, sometimes transversely elongate secondary sense organs on antennae of Aphididae.

**rhizophores** n.pl. [Gr. *rhinos*, nose; *phorein*, to bear] (MOLL: Gastropoda) 1. In Opisthobranchia, the second pair of modified tentacles commonly surrounded at the base by a collarlike fold, located behind the first pair; chemoreceptors at base of the tentacles. 2. In Nautiloidea, a digitiform chemoreceptor present beneath each eye.

**rhrepidoglossate** a. [Gr. *rhapis*, fan; *glossa*, tongue] (MOLL: Gastropoda) Having a radula with each transverse row furnished with numerous long, narrow, hooked marginal teeth arranged in a fan-like manner and usually five similar ad-medians on either side.

**rhizocaul, rhizocaulome** see **hydrocaulus**

**rhizoclad** n. [Gr. *rhiza*, root; *klados*, branch] (PORIF) A megasclere desma with rootlike processes; rhizoclone

**rhizoid** n. [Gr. *rhiza*, root; *eidos*, like] (BRYO) A rootlike structure composed of one or more kenozooids.

**rhizoid spines** (BRACHIO) Spines that serve to attach the animal, either by entanglement or by cementing themselves

to a foreign surface.

**rhizome** n. [Gr. *rhiza*, root] (CNID: Hydrozoa) The stolon; the hydrorhiza.

**rhizomorphous** a. [Gr. *rhiza*, root; *morphos*, form] Root-like.

**rhizophagous** a. [Gr. *rhiza*, root; *phagein*, to eat] Root-eating.

**rhodopsin** n. [Gr. *rhodon*, rose; *ops*, eye] (ARTHRO: Insecta) A visual pigment of the rhabdomeric microvilli, on which the primary photoreceptor process depends.

**rhombogen** n. [Gr. *rhombos*, revolve; *gennaein*, to produce] (MESO: Rhombozoa) A stage in the life cycle in the adult in a sexually mature host; stage follows the nematogen phase and produces infusorigens.

**Rhombozoa, rhombozoans** n.; n.pl. [Gr. *rhombos*, revolve; *zoon*, animal] A class of Mesozoa; minute parasitic animals in the renal organs of Cephalopoda.

**rhombus** n. [Gr. *rhombos*, revolve] A parallelogram with oblique angles. **rhomboidal** a.

**rhopalium** n.; pl. **-lia** [Gr. *rhopalon*, club] (CNID) A hollow tentacle or sense organ with endodermal statoliths and rarely ocelli, that lay in each notch between the lappets at the end of a pedalius; lithostyle; statorhabd; tentaculocyst; statocyst; colletocystophore.

**rhopalocercous cercaria** (PLATY: Trematoda) Cercaria possessing a tail as wide as, or wider than, the body.

**rhopaloneme** n. [Gr. *rhopalon*, club; *nema*, thread] (CNID: Anthozoa) A nematocyst with the tube consisting of an elongate sac and a club-shaped thread with an adhesive nature.

**rhopalostyle** n. [Gr. *rhopalon*, club; *stylos*, pillar] (PORIF) A lumpy megasclere spicule with a bifurcate head.

**rhynchocoel** n. [Gr. *rhynchos*, snout; *koilos*, hollow] (NEMER) A dorsal fluid-filled tubular chamber that houses the ever-sensible muscular proboscis.

**Rhynchocoela** n. [Gr. *rhynchos*, snout; *koilos*, hollow] Formerly used in place of Nemertea.

**rhynchocoel villus** (NEMER) A blood vessel running in the mid-

ventral line of the rhynchocoel.

**rhynchodaeum** n. [Gr. *rhynchos*, snout; *demas*, body] 1. (ANN: Hirudinoidea) A cavity at the anterior end of the digestive tract. 2. (NEMER) A tubular chamber anterior to the proboscis, opening anteriorly by means of the proboscis pore.

**rhynchostome** n. [Gr. *rhynchos*, snout; *stoma*, mouth] (NEMER) The proboscis pore.

**rhynchoteuthis stage** (MOLL: Cephalopoda) In Ommastrephidae, a juvenile form with tentacles fused into a rostrum or trunklike proboscis; the tentacles separate later.

**rhypophagous** a. [Gr. *rhypos*, dirt; *phagein*, to eat] Eating dirt or filth.

**rhythm** n. [Gr. *rhythmos*, measured motion] Regular periodic changes. see **circadian**, **diurnal**.

**rib** n. [A.S. *ribb*, a rib] 1. In Gastropoda and Brachiopoda shells, a long and narrow ridge; a costa. 2. (MOLL: Bivalvia) A broad and prominent elevation of the shell surface; usually directed radially; costa.

**Ribaga's organ** (ARTHRO: Insecta) In some female Hemiptera, pouches on various places of the nongenital abdomen; hemocoelic fecundation instead of by means of the customary ducts; ectospermalege; Berlese's organ. see **mesospermalege**.

**ribbon** n. [OF. *ribon*] (MOLL: Gastropoda) A flat spiral surface elevation.

**riblet** n. [A.S. dim. *ribb*, rib] A small or rudimentary rib; costella.

**riboflavin** n. [L. alteration of *arabinose*; *flavus*, yellow] 6,7-dimethyl-9-D-ribitylisoallozazine, a water-soluble yellow pigment, generally occurring in animal tissues in a form in which it is metabolically active.

**ribonucleic acid** (RNA) Long chain polymers of ribose and certain organic bases; differing from DNA in using the base uracil and usually single stranded.

**ribose** n. [L. alteration of *arabinose*] Pentose sugar which with certain organic bases makes up RNA and DNA polymers.

**ribosome** n. [L. alteration of *arabinose*; Gr. *soma*, body] Aggregations of RNA and proteins that act in synthesis of proteins.

**ridge** n. [A.S. *hrycg*] Any raised line or strip on a surface.

**right valve** (MOLL: Bivalvia) When holding the bivalve shell with the hinge up and the apex or umbo pointed away from and pallial sinus toward the holder, then the right valve is on the right.

**rimate** a. [L. *rima*, fissure] 1. Provided with a very narrow cavity; a very small hole or crack. 2. (MOLL: Gastropoda) Referring usually to the umbilicus.

**rimose** a. [L. *rima*, fissure] Having many clefts or excavations.

**rind cells** The layer of nerve cell bodies on the surface of invertebrate ganglia, consisting of perikaryon, glial and neuron cells; not nerve endings or synapses.

**ring** n. [A.S. *hring*, ring] 1. A circle or annulus; circinate. 2. (ARTHRO: Diplopoda) A non-systematic and colloquial term for the trunk segments; avoids the need to differentiate between single segments and diplosegments.

**ring canal** 1. (CNID: Hydrozoa) A circular canal around the margin of the umbrella into which the radial canal join as part of the gastrovascular system. 2. (ECHINOD) A circular part of the water-vascular system encircling the esophagus

**ringed gland** (ARTHRO: Insecta) In Hemiptera, a gland, sometimes paired, situated dorsally or ventrally on the vagina, or on the vaginal pouch; sometimes ringed by annual sclerotizations known as ring sclerites.

**ringent** a. [L. *ringens*, gaping] (MOLL: Bivalvia) Gaping, as some valves.

**Ringer's solution** Used as a physiological saline for vertebrates and invertebrates.

**ring gland** 1. (ARTHRO: Insecta) In higher Diptera, a glandular organ surrounding the aorta just above the brain, formed by the combining of the corpora cardiaca and the corpora allata and the thoracic glands; Weismann's ring. 2. (PLATY: Trematoda) A ring of glands opening with the aperture above to secrete a substance to digest the epidermal cells

of the host.

**ring nerve** see **nerve ring**

**ring segments** (ARTHRO: Insecta) Ring-like basal segment(s) of the *flagellum*, much smaller than the segments following.

**ring septum** (BRYO: Stenolaemata) The centrally perforated skeletal diaphragm in the living chamber of a zooid.

**ring vein** see **ambient vein**

**ring vessel** see **ring canal**

**ring wall** see **anellus**

**riparian, ripicolous** a. [L. *ripa*, bank] Frequenting rivers or streams.

**rivose** a. [L. *rivus*, groove] Marked with irregular furrows; nonparallel furrows or canals.

**RNA** Ribonucleic acid

**robust** a. [L. *robustus*, hardy] Short, stout, robust.

**rod border** see **brush border**

**rod-shaped organ** see **organ of Bellonci**

**rooting tuft** (PORIF) An aggregate of spicules protruding from the lower surface with root functions.

**root stalk** (CNID: Hydrozoa) Hydrorhiza or stolon; horizontal root of a colony.

**ropalocercous cercaria** see **ropalocercous cercaria**

**rosaceous** a. [L. *rosa*, rose] Having a quality of a rose, such as color or scent.

**rosette plate** (BRYO: Gymnolaemata) In Cheilostomata, multiporous, subcuticular area in the verticle walls for passage of fibers between zooids; multiporous septulum.

**rosettes** n.pl. [L. dim. *rosa*, rose] 1. A process resembling a rose in shape, applied to organs or markings of many invertebrates. 2. (BRYO) The clubbed-shaped cells of the funicular system (communication organs). 3. (ECHINOD) Five large ossicles that maintain the shape and width of the suckers on the tube feet; pelliions. 4. (NEMATA) Patterns of cuticle surrounding the genital papillae; the uvette of the

Demanian vessels. 5. (PLATY: Cestoda) In Monogenea, elaborately fringed lips on the suckers.

**rostell** see **rostellum**

**rostelliform** a. [L. *rostellum*, small beak; *forma*, shape] Shaped like a rostellum.

**rostellum, rostell** n. [L. *rostellum*, small beak] 1. A small beak or rostrum. 2. (ARTHRO: Insecta) The tubular piercing and sucking mouth parts. 3. (BRACHIO) Low projection between anterior muscle scars to which internal oblique muscles are attached. 4. (PLATY: Cestoda) A rounded prominence on the anterior end of the *scolex*, often furnished with retractile spines or hooks; sometimes referred to as an acolid organ. 5. (PLATY: Trematoda) An anterior holdfast; rhynchus.  
**rostellar, rostellate** a.

**rostrad** adv. [L. *rostrum*, beak] Toward the anterior end; cephalad; toward the rostrum when anterior.

**rostral filaments** see **rostralis**

**rostral incisure** (ARTHRO: Crustacea) In Ostracods, a gap between the rostrum in the anterior margin of the valve allowing for protrusion of the antenna (second antenna); rostral notch.

**rostralis** n. [L. *rostrum*, beak] (ARTHRO: Insecta) In Coccoidea, the modified mandibles and maxillae that pass through the rostrum into the host plant.

**rostral latus** (ARTHRO: Crustacea) In Lepadomorph branacles, a plate on each side of the rostrum or below the scutum. see **rostromedial**.

**rostral notch** see **rostral incisure**

**rostral plate** (ARTHRO: Crustacea) In malacostracan Phyllocarida, the anteriorly projecting, movably articulated, median extension of the carapace.

**rostral tooth** (ARTHRO: Crustacea) On a Decapoda carapace, a tooth on the *rostrum*, may be single or multiple, with the upper, lower and lateral teeth distinguished.

**rostrate** a. [L. *rostrum*, beak] Having a rostrum or beak-like process.

**rostriform** a. [L. *rostrum*, beak, *forma*, shape] Having the

form of a beak.

**rostromedial** (ARTHRO: Crustacea) In balanomorph barnacles, one of a pair of compartmental plates overlapping on each side of the *rostrum*, sometimes overlap is fused with the rostrum laterally or to each other. see **rostral latus**.

**rostrulum** n. [L. dim. *rostrum*, beak] A small beak or rostrum.

**rostrum** n.; pl. **-tra** [L. *rostrum*, beak] 1. A beak or snout. see **rostellum**. 2. (ARTHRO: Chelicerata) The labrum of spiders. 3. (ARTHRO: Crustacea) The median pointed process at the end of the cephalothorax. *a.* In thoracic barnacles, a valve between the lateral and opposite carina at the basiscutal end of the capitulum; simple and bearing alae in many balanomorphs, but compound and overlapping the laterals in higher balanomorphs. see **compound rostrum**. 4. (ARTHRO: Insecta) *a.* In Hemiptera, the beak. *b.* In Coleoptera scarab beetles, a rigid, ventral extension of the paramere. 5. (BRACHIO) Inner elevation of the brachial valve; a pair of club shaped elevations for muscle attachment for the brachial protractor muscles. 6. (MOLL: Cephalopoda) *a.* The anteriormost point of the upper and lower mandibles. see **beak**. *b.* The spine anchored on the posterior end of a cuttle bone and some pens. 7. (NEMATA: Secernentea) In Aphelenchida males, the beak-like projection ventrad near the proximal end of the spicule, joining the dorsal and ventral spicular shafts.

**rotate** v.i. [L. *rota*, wheel] To turn; to revolve; to turn around on its own center or axis.

**rotation** n. [L. *rota*, wheel] Turning around an axis.

**rotelliform** a. [L. dim. *rota*, wheel; *forma*, shape] (MOLL: Gastropoda) Almost lenticular, but with a low obtuse spire. see **umboniform**.

**Rotifera, rotifers** n.; n.pl. [L. *rota*, wheel; *fero*, bear] A phylum of aquatic pseudocoelomate animals, many with an anterior ciliated corona that looks like a rotating wheel; wheel animalcules.

**rotundate** a. [L. *rotundus*, round] Rounded; nearly circular; rounded at the angles, sides, or ends

**round dance** (ARTHRO: Insecta) In Hymenoptera, a dance of

bees indicating a source of food close to the hive.

**royal cell** (ARTHRO: Insecta) 1. In Isoptera, a small pear-shaped chamber in which the termite queen lays her eggs. 2. In Hymenoptera, the large, oblong, waxen cell constructed by the honey bee workers to rear queen larvae; queen cell.

**royal jelly** (ARTHRO: Insecta) In Hymenoptera, a complex material secreted by the pharyngeal salivary glands of the worker honey bee with proteolytic activity, rich in fatty acids, the B-vitamins and other substances, that is fed to the brood at the start of larval life and induces queen development if continued as a diet.

**royal pairs** (ARTHRO: Insecta) In social insects, the sexually active males and females.

**r-strategist** Species of organisms that use a survival reproductive 'strategy' characterized by high fecundity, rapid development, early reproduction, small body size, and semelparity; populations controlled by density-independent factors.

**R technique** An analysis of association of characters in a data matrix.

**rubescens** a. [L. *rubescere*, to grow red] Being reddish, or becoming red.

**rubiginose, rubiginous** a. [LL. *rubiginosus*, rusty] Being rusty or brownish red; rust-colored.

**rubineous** a. [L. *ruber*, red] Ruby-like in appearance.

**rudiment** n. [L. *rudis*, rough] The beginning of a structure or part. see **anlage, precursor**.

**rudimentary** n. [L. *rudimentum*, a beginning] An incomplete stage of development; initial; early; undeveloped. see **vestigial**.

**rudimentary posterior uterine branch** see **postuterine sac**

**ruffles** n.pl. [ME. *ruffeln*] (MESO: Rhombozoa) In Dicyemida, slender projections of the exterior surface.

**rufous** a. [L. *rufus*, red] Being reddish, red-yellowish; rufescent.

- ruga** n. [L. *ruga*, wrinkle] A wrinkle, fold or crease. **rugose** a.
- rugosissimus** a. [L. *rugosus*, full of wrinkles; *-issimus*, very] Being extremely rugose or wrinkled.
- rugosity** n. [L. *rugosus*, full of wrinkles] The condition of being rugose or corrugated.
- rugula** n.; pl. **-lae** [L. dim. *ruga*, wrinkle] A small wrinkle.
- rugulose** a. [L. dim. *rugosus*, full of wrinkles] Having fine wrinkles.
- runcinate** a. [L. *runcinare*, to plane off] Notched; in several transverse acute segments inclined backward.
- rutella** n.pl.; sing. **rutellum** [L. dim. *rutrum*, shovel] (ARTHRO: Chelicerata) In Acari, paired hypertrophied setae on the subcapitulum, thick, hard and dentate, associated with ingestion of solid food. **rutellar** a.
- rutilous** a. [L. *rutilus*, red, golden red] Of a shining bronze red color.
- rypophagous** see **rhyphagous**