

CERCARIA MUTABILIS.



CHARACTER GENERICUS.

Vermis nudo oculo inconspicuus, subpellucidus, caudatus.

CHARACTER SPECIFICUS, &c.

CERCARIA VIRIDIS, (interdum rubra,) corpore cylindraceo mutabili, cauda acuminata sub-bifida.

CERCARIA VIRIDIS ?

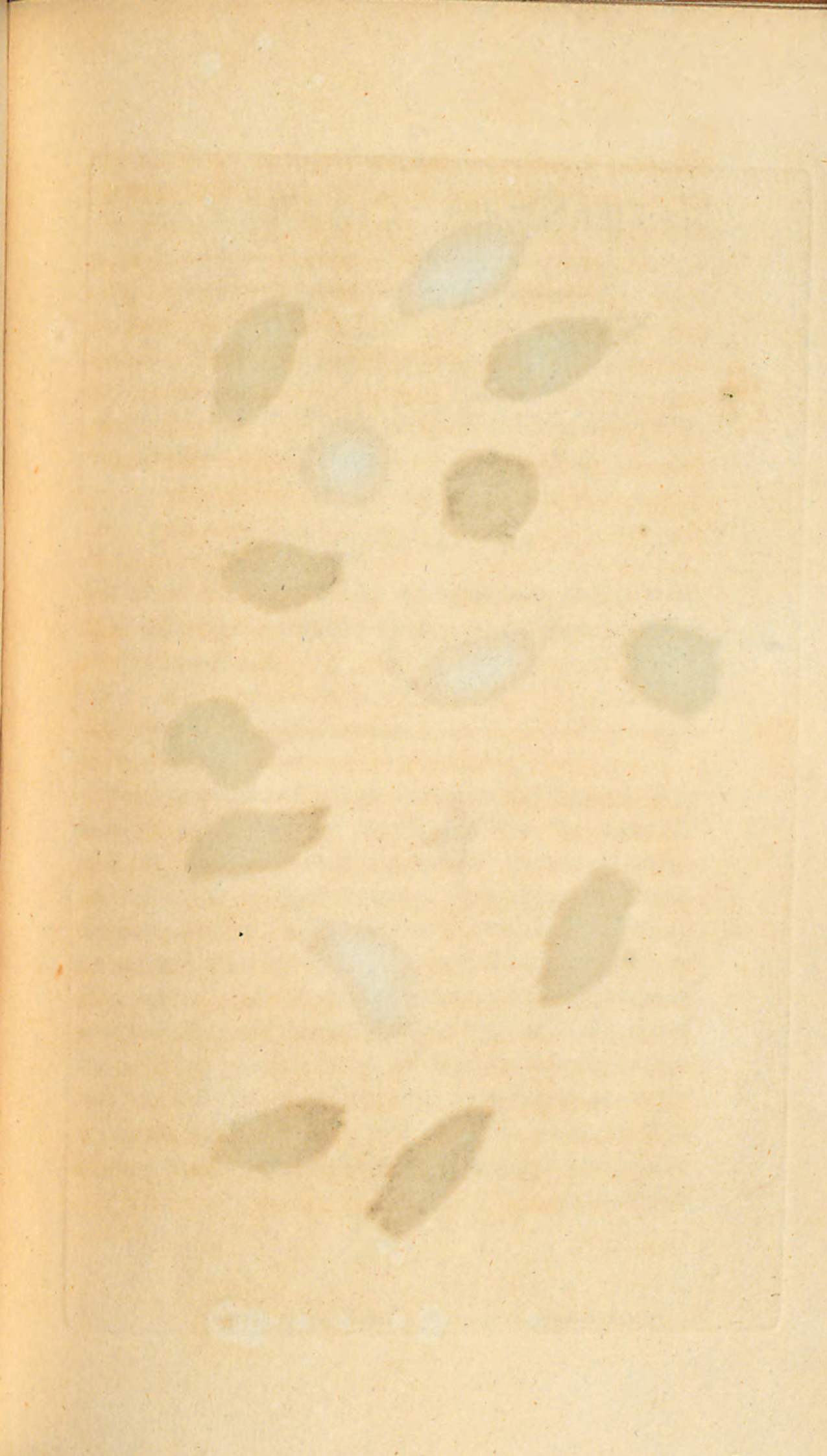
Müll. anim. infus. p. 126. tab. 19.
fig. 6—13.

Ostenditur in tabula animalculum, situ varium, microscopio summopere auctum. Hujusmodi æstivis mensibus densissima super paludes conglomerantur agmina, adeo ut interdum tota superficies rubra videatur seu viridis; alias ipsius aquæ corpus vel hoc vel illo colore non leviter tingatur. Forma limaci, motu hirudini similior est cercaria. Cum huic, ut et aliis multis animalculis, summa sit contractionis vis, hinc fit ut nunc fere in orbem colligatur, nunc in diversissimos longitudinis gradus ad libitum extendatur. Motu incedit tardiusculo; cumque natet penitus explicata, utraque extremitas pellucida videtur, corpusque granulis virentibus aut rubellis, piscium ova non male referentibus, refertum.

refertum. Caput seu anterior pars obtusior, cauda autem acuta, apicem interdum levissime bifurca; quod tamen vix ac ne vix conspici possit. Cum in reliquis omnibus prorsus conveniant cercariæ in tabula depictæ, nisi quod hæ sint rubræ, illæ virides, nolumus ob solam coloris differentiam vere distinctas pronunciare. Virides sæpissime mensibus Maii et Junii, interdum citius, mane plerumque et vespere aquarum stagnantium superficiem occupant, medio die fundum petentes. Rubræ, quæ longe rariores, aquas nonnunquam quasi in sanguinem convertunt; narrantque auctores universos populos hoc signo ingenti stupore perculsos: quod sane vulgo facile condonari possit; causam enim sæpissime ignorent necesse est, cum ipsa animalcula sine microscopii ope non nisi acutissimo oculo conspici possint. Vidi egomet non semel magnam paludem una nocte rubore obductam et sanguine veluti perfusam, cujus die proxime elapso ne minimum erat vestigium. Notandum est etiam eodem fere modo, licet minus, decolorari paludes a monoculo pulice Linnæi, nec-non a larva culicis communis, aliisque multis. Quid igitur mirum, antea actis temporibus, cum adhuc curta esset philosophia, vitrique optici ignoraretur usus, si homines vani et meticulosi aquas sanguineum rubentes conspicati, Deos illico infestos et præsens aliquod exitium pertinuerint? Immo narrat celeberrimus Swammerdamus totam Lugduni civitatem hac ipsa re supra modum attonitam, aquis primo mane immenso (ut postea compertum est) animalculorum agmine quasi cruentatis: nec dubitamus quin species eadem fuerit cum hac nostra quam descripsimus. Hoc præterea omine turbatos Romanorum animos, inter alia quæ
Cæsar

Cæsaris fatum aut præibant aut sequebantur portenta,
memoravit Virgilius.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”





THE CHANGEABLE CERCARIA.



GENERIC CHARACTER.

Worm unobservable by the naked eye, somewhat pellucid, tailed.

SPECIFIC CHARACTER.

GREEN CERCARIA, (sometimes red,) with cylindric mutable body, and slightly bifid pointed tail.

The animalcule of which microscopical figures, very highly magnified, are represented on the annexed plate, is amongst those legions of animated beings which, in the warmer months, contribute to people the generality of stagnant waters; sometimes covering the whole surface with a continued sheet of a red or green colour, and sometimes diffusing a strong tinge of those colours throughout the whole mass or body of the water. The general shape of this animalcule is not much unlike that of a slug, but its motions are more analogous to those of a leech. In its postures it is infinitely variable, possessing, like many others of the animalcular

animalcular tribe, the highest degree of contractile power; in consequence of which it occasionally appears in all the various states of elongation and contraction represented in the plate; and not unfrequently reduces itself to a globular form. Its motions are rather slow than swift, and when swimming at full length it generally appears transparent at both extremities, while the body seems filled with a congeries of globules or grains of a green or reddish colour, and not ill resembling the spawn of fish. The head or fore-part is obtuse, but the tail or extremity is acute, and sometimes exhibits a slight appearance of bifurcation at the tip; but this is a particular which in general is scarce to be perceived. The difference in colour between these animalcules seems hardly sufficient to justify our regarding them as specifically distinct; since both the green and the red sort are so perfectly alike in other respects that no difference can be perceived between them. The green sort may be very frequently observed in most stagnant waters in the months of May and June, and sometimes much sooner, appearing commonly on the surface in the evening and early in the morning, and retiring towards the middle of the day to the bottom. The red variety is far less common, and the appearance which it sometimes exhibits is such as to alarm a superstitious mind with the idea of the water being tinged with blood: a panic of which numerous instances have been adduced by authors; and which is the more excuseable in those who are ignorant of the cause, as the animalcules are so extremely minute as to be utterly imperceptible, (except to an uncommonly sharp

sharp eye,) without the assistance of a glass; so that even taking up the water and examining it affords to the vulgar no satisfactory elucidation. I remember to have more than once observed the whole surface of a large moat or pool completely covered in the space of a single night with this animalcule, when the day before there was not the least appearance of discoloration in the water: the whole surface appeared as if covered with florid blood. It should be observed that several other species of animalcules sometimes give the same tinge to stagnant waters, though in a far less striking degree: thus the *monoculus pulex* of Linnæus is frequently so numerous as to redden the water: the larva of the common gnat has also been known to produce a similar discoloration.

These are appearances which in less enlightened ages, unassisted by the microscope, have so often filled the minds of the people with the most terrible apprehensions, and have been regarded either as the precursors of some great calamity, or magnified into the immediate symptoms of heavenly displeasure. We are assured by the celebrated Swammerdam that the city of Leyden was in a state of consternation on discovering one morning that the waters of that place were apparently changed into blood; which, upon accurate examination, was found to be owing to no other cause than prodigious numbers of minute red animalcules, (in all probability of the very same species here represented.) For the effect which such appearances produced on the minds of the ancients, it may be sufficient to recal to the recollection of the reader the words of Virgil,

Virgil, who, in his terrific list of prodigies which either preceded or accompanied the death of Julius, has not neglected to enumerate this phenomenon.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruor cessavit.”

The trembling priest o'er boding victims stood,
And wells, portentous omen! flow'd with blood.



Shaw, George. 1792. "The Changeable Cercaria, *Cercaria mutabilis* [Pl. 107]." *The Naturalist's Miscellany* 3(XXXV), <https://doi.org/10.5962/p.304527>.

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