1) P.Oxy. 2744 Col. II I. 20-32 (2nd cent. CE) ed. Roselli, ZPE 33, 1979, 9 (l. 24-29 Luppe, ZPE 36, 1979, 55-56)

(cf. Supplementa problematorum 2,156 ed. Kapetanaki / Sharples)

ὄτι δ' ἐν τοις τοιο[ύ-]	20
τοις τόποις δι[α]τρείβει, δηλώ-	
σει καὶ Ἀριστέλης καὶ τὴν αἰτίαν πρ[ό]στ[ι]θεὶς ἐν Ἀπορ	»[ή-]
μασιν οὕτω[σί] διὰ τί ἡ ὖς τοῖς	
δυσώδεσι χαίρε[ι]; η [δ]ιὰ τὸ πλατὺν	25
ἔχειν τὸν μ[υ]κ[τ]ῆρα καὶ οὐκ [ὀξύ[ν	
ούκ αἰσθητικ[ός] ἐστι, διὰ [δ]ὲ τὸ [μὴ	
αἰσιθητικόν ιεἶνιαιι διάκει ται [πράως	
πιριός τὰς ὀσμάς, ὥσπε[ρ οί]	
Φρύγες τοῖς [φ]αύλο[ι]ς οἴνοι[ς χαίρου-]	30
σ[ι] καὶ αὐτὴ ταῖς διεφθαρμέ[ναις ὀσ-]	
μαΐς καὶ σαπραΐς	

That (the pigs) spends time in such areas reveals Aristotle too, adding the cause as well in his *Puzzles*: Why does the pig take pleasure in things with a bad smell? Is it that, because it has a nostril that is wide and not keen, it is not able to perceive smells well; and because it is not able to perceive well it is mildly disposed towards smells? So as the Phrygians take pleasure in inferior wines, [so the pig does] in corrupt and rotten smells; ...

(tr. Kapetanaki / Sharples with addition)

2) Theophrastus, fr. 369 FHS&G = Athenaeus, Deipn. 7.95 314B-C

Θεόφραστος δ' ἐν τῷ Περὶ τῶν φωλευόντων διὰ τὸ ψῦχός φησι τὴν νάρκην κατὰ γῆς δύεσθαι. ἐν δὲ τῷ Περὶ τῶν δακέτων καὶ βλητικῶν διαπέμπεσθαί φησι τὴν νάρκην τὴν ἀφ' αὐτῆς δύναμιν καὶ διὰ τῶν ξύλων καὶ διὰ τῶν τριοδόντων ποιοῦσαν ναρκῶν τοὺς ἐν χεροῖν ἔχοντας. Theophrastus, in *On (Creatures) that Retreat into Holes*, says that it is on account of the cold that the electric ray burrows under the earth. And in *On (Creatures) that Bite and Sting* he says tha the electric ray sends the force from itself even through pieces of wood and fishspears, numbing those who are holding them.

3) Theophrastus, fr. 359A FHS&G (part) = Photius, *Bibl.* 278 527b34-40 (p. 164,28-165,5 Henry)

οί δὲ ἀττέλεβοι καὶ αἱ ἀκρίδες πανταχοῦ μέν εἰσιν, ὡς εἰπεῖν, πλήθεται δὲ ταῦτα τῷ τε τόπους οἰκείους λαμβάνειν καὶ τῷ μὴ διαφθείρεσθαι αὐτῶν τὰ ὠά, ὃ σψμβαίνει διὰ τὴν ἀργίαν τῆς χώρας· ἐν γὰρ τῷ γεωργουμένῃ ἀπόλλυνται. Διὸ καὶ ἐκ τῆς ἐρήμου καὶ ἀργούσης καταφέρονται πρὸς τὴν οἰκουμένην καὶ ἐργάσιμον.

But locusts and grasshoppers occur more or less everywhere; abundance of these is caused by their occupying suitable places and by their eggs not being destroyed, which happens because the place is not cultivated. For in places that are farmed they are destroyed. Anf for this reason they descend from deserted and uncultivated places upon those that are inhabited and cultivated.

4) Theophrastus, fr. 362A FHS&G (part) = Photius, *Bibl.* 278 528a10-14 (p. 166,30-167,1 Henry)

άλλ' ὅτι μὲν οὐ διὰ φθόνον ταῦτα ποιεῖ τὰ ζῷα, ἀλλὰ οἱ ἄνθρωποι ἐκ τῆς ἰδίας ὑπολήψεως ταύτην αὐτοῖς περιῆψαν τὴν αἰτίαν, παντὶ δῆλον. πόθεν γὰρ τοῖς ἀλόγοις ἡ τοσαύτη σοφία, ἡν καὶ οἱ λογικοὶ μετὰ συχνῆς μελέτης μανθάνοψσιν;

However, it is clear to everyone that the animals do not do these things because they are grudging, but rather that men have imposed this motive upon them as a result of their own supposition. For how could irrational creatures have so much knowledge, seeing that the rational ones only acquire it by prolonged study?

5) Eudemus fr. 132 Wehrli = Aelianus NA 5.7

έν Αἰγύπτω πίθηκος, ὥς φησιν Εὔδημος, ἐδιώκετο, αἰλουροι δὲ ἦσαν οἱ διώκοντες. ἀνὰ κράτος οὖν ἀποδιδράσκων ὥρμησεν εὐθὺ δένδρου τινός, οἳ δὲ καὶ αὐτοὶ ἀνέθορον ὥκιστα· ἔχονται γὰρ τῶν φλοιῶν, καὶ ἔστι καὶ τούτοις ἐς δένδρα ἐπιβατά. ὃ δὲ ὡς ἡλίσκετο εἶς ὥν, καὶ ταῦτα ὑπὸ πολλῶν, ἐκπηδὰ τοῦ πρέμνου, καὶ κλάδου τινὸς ὑπηρτημένου καὶ μετεώρου λαμβάνεται ἄκρου ταῖς χερσί, καὶ ἐγκρατῶς εἴχετο οὐκ ἐπ' ὀλίγον· οἱ δὲ αἰλουροι, ὡς οὐκ ἦν ἐφικτὰ αὐτοῖς ἔτι, ἐπ' ἄλλην θήραν κατέδραμον. ὁ δὲ κατὰ πολλὴν τὴν σπουδὴν διεσώζετο, ἑαυτῷ ὀφείλων ὡς τὸ εἰκὸς ζωάγρια.

In Egypt, a monkey, as Eudemus says, was being chased, and the chasers were cats. Running away with all its might, it rushed straight up a tree. But they too leapt up swiftly; for they can grip the bark and climb trees too. But the monkey, as it was about to get caught, one by many, jumps out of the trunk and grabs the end of a branch hanging above it with its hands, and held on tight for no short time. The cats, since they could no longer reach it, ran away after other prey. It saved itself by great effort, owing itself a thank-offering.

6) Clearchus, fr. 105 Wehrli = Athenaeus, *Deipn.* 7.95 314b-c (Ed. D. Olson)

Θεόφραστος δ' έν τῷ Περὶ τῶν φωλευόντων διὰ τὸ ψῦχός φησι τὴν νάρκην κατὰ γῆς δύεσθαι. ἐν δὲ τῷ Περὶ τῶν δακέτων καὶ βλητικῶν διαπέμπεσθαί φησι τὴν νάρκην τὴν ἀφ' αὑτῆς δύναμιν καὶ διὰ τῶν ξύλων καὶ διὰ τῶν τριοδόντων, ποιοῦσαν ναρκῶν τοὺς ἐν χεροῖν ἔχοντας. εἴρηκε δὲ τὴν αἰτίαν Κλέαρχος ὁ Σολεὺς ἐν τῷ Περὶ νάρκης, ἄπερ μακρότερα ὄντα ἐπιλέλησμαι, ὑμῶς δὲ ἐπὶ τὸ σύγγραμμα ἀναπέμπω.

Theophrastus in his *On Animals that Hibernate* says that cold causes the electric ray to burrow underground. And in his *On Biting and Venomous Creatures* he claims that the electric ray can exercise its influence through sticks or fishing spears, causing those who hold such implements in their hands to go numb. Clearchus of Soli in his *On the Electric Ray* offers an explanation of this; but because his remarks are rather extended, I have forgotten them, and I refer you to the treatise itself.

7) Clearchus, fr. 101 Wehrli = Athenaeus, Deipn. 8.5 332 b-e (Ed. D. Olson)

οὐκ ἔλαθεν δέ με οὐδὲ Κλέαρχος ὁ ἀπὸ τοῦ περιπάτου ὅσ' εἴρηκε καὶ περὶ τοῦ ἐξωκοίτου καλουμένου ἰχθύος ἐν τῷ ἐπιγραφομένῷ Περὶ τῶν Ἐνύδρων. εἴρηκε γάρ—κρατεῖν δ' οἶμαι καὶ τῆς λέξεως οὕτως ἐχούσης: ὁ ἐξώκοιτος ἰχθύς, ὃν ἔνιοι καλοῦσιν ἄδωνιν, τοὔνομα μὲν εἴληφε διὰ τὸ πολλάκις τὰς ἀναπαύσεις ἔξω τοῦ ὑγροῦ ποιεῖσθαι. ἐστὶ δὲ ὑπόπυρρος καὶ ἀπὸ τῶν βραγχίων ἑκατέρωθεν τοῦ σώματος μέχρι τῆς κέρκου μίαν ἔχει διηνεκῆ λευκὴν ῥάβδον. ἐστὶ δὲ στρογγύλος ἀλλ' οὐ πλατὺς ὢν κατὰ τὸ μέγεθος ἴσος ἐστὶ τοῖς παραιγιαλίταις κεστρινίσκοις. οὗτοι δ'εἰσὶν ὀκταδάκτυλοι μάλιστα τὸ μῆκος. τὸ δὲ σύνολον ὁμοιότατός ἐστι τῷ καλουμένῳ τράγῷ ἰχθυδίῷ πλὴν τοῦ ὑπὸ τὸν στόμαχον μέλανος, ὃ καλοῦσι τοῦ τράγου πώγωνα.

έστὶ δ' ὁ ἐξώκοιτος τῶν πετραίων καὶ βιοτεύει περὶ τοὺς πετρώδεις τόπους· καὶ ὅταν ἦ γαλήνη, συνεξορούσας τῷ κύματι κεῖται ἐπὶ τῶν πετριδίων πολὺν χρόνον ἀναπαυόμενος ἐν τῷ ξηρῷ καὶ μεταστρέφει μὲν ἑαυτὸν πρὸς τὸν ἥλιον. ὅταν δ' ἱκανῶς αὐτῷ τὰ πρὸς τὴν ἀνάπαυσιν ἔχῃ, προσκυλινδεῖται τῷ ὑγρῷ, μέχρι οὗ ἂν πάλιν ὑπολαβὸν αὐτὸν τὸ κῦμα κατενέγκῃ μετὰ τῆς ἀναρροίας εἰς τὴν θάλασσαν. ὅταν δ' ἐγρηγορὼς ἐν τῷ ξηρῷ τύχῃ, φυλάττεται τῶν ὀρνίθων τοὺς παρευδιαστὰς καλουμένους, ὧν ἐστι κήρυλος, τρόχιλος καὶ ὁ τῇ κρεκὶ προσεμφερὴς ἐρωδιός· οὗτοι γὰρ ἐν ταῖς εὐδίαις παρὰ τὸ ξηρὸν νεμόμενοι πολλάκις αὐτῷ περιπίπτουσιν, οῦς ὅταν προῖδηται φεύγει πηδῶν καὶ ἀσπαίρων, ἕως ἂν εἰς τὸ ὕδωρ ἀποκυμβήσῃ.

I am also familiar with what Clearchus the Peripatetic says in his work entitled *On Aquatic Creatures* on the subject of the so-called *exōkoitos* fish. He says—I believe that I can quote the passage, which runs as follows: The *exōkoitos* fish, which some authorities refer to as an *adōnis*, got its name from the fact that it often rests outside of (*exō*) the water. It is reddish and has a single white stripe that runs the length of its body on both sides from its gills to its tail. It is globular, but not wide across, and is the same size as the small gray mullets caught along the shore, which are six inches long at most. In general it most closely resembles the so-called *tragos* ("billy-goat") fish, except for the dark part beneath its mouth, which is referred to as a "goat's beard."

The *exōkoitos* is a rock-fish and lives in rocky areas; whenever the sea is calm, it rides a wave out of it and lies on the pebbles for a long time, resting on the beach, and turns itself to face the sun. After it has rested enough, it rolls back toward the water until the waves pick it up again and carry it back out to sea as they leave the shore. As it lies awake on the beach, it keeps an eye out for the so-called fairweather birds, which include the *kērulos*, the Egyptian plover, and the type of heron that resembles a *krēx*. Because when the weather is good, these birds feed along the coast and often attack the *exōkoitos*; when it spies them, it tries to get away by flopping and thrashing about, until it finally jumps into the water.

8) Clearchus, fr. 36 Wehrli = Athenaeus, Deipn. 9.42 389f (Ed. D. Olson)

Κλέαρχος δ' ἐν τῷ Περὶ τοῦ Πανικοῦ οἱ στρουθοί, φησί, χοἰ πέρδικες, ἔτι δὲ οἱ ἀλεκτρυόνες καὶ οἱ ὅρτυγες προΐενται τὴν γονὴν οὐ μόνον ἰδόντες τὰς θηλείας, ἀλλὰ κἂν ἀκούσωσιν αὐτῶν τὴν φωνήν. τούτου δὲ αἴτιον ἡ τῇ ψυχῇ γινομένη φαντασία περὶ τῶν πλησιασμῶν. φανερώτατον δὲ γίνεται περὶ τὰς ὀχείας, ὅταν ἐξ ἐναντίας αὐτοῖς θῃς κάτοπτρον⁻ προστρέχοντες γὰρ διὰ τὴν ἔμφασιν ἀλίσκονταί τε καὶ προΐενται τὸ σπέρμα, πλὴν τῶν ἀλεκτρυόνων. τούτους δ' ἡ τῆς ἐμφάσεως αἴσθησις εἰς μάχην προάγεται μόνον. ταῦτα μὲν ὁ Κλέαρχος.

Clearchus says in his *On Panic*: Sparrows, partridges, as well as roosters and quail, ejaculate not just when they see the hens, but even if they simply hear them calling. What causes this is the image of mating that forms in their mind. This becomes most obvious during mating-season, if you place a mirror in front of them; because they run up to their reflection, become entranced by it, and ejaculate. Roosters are the exception; when they see their reflection, they merely feel an urge to fight it. Thus Clearchus.

- Althoff, J. "Biologie im Zeitalter des Hellenismus (ca. 322-31 v. Chr.)" in G. Wöhrle (Ed.), Geschichte der Mathematik und der Naturwissenschaften in der Antike 1: Biologie. Stuttgart 1999, 155–180.
- Bonitz, H., Index Aristotelicus, Berlin 1870.
- Desclos M.-L., W.W. Fortenbaugh (Eds.), Strato of Lampsacus. Text, Translation, and Discussion (Rutgers University Studies in Classical Humanities XVI), New Brunswick (U.S.A.) / London (U.K.), 2011.
- Düring, I., Aristotle in the Ancient Biographical Tradition, Göteborg 1957.
- Fortenbaugh, W.W., P.M. Huby, R.W. Sharples, D. Gutas (Eds.), Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence, 2 Vol., Leiden et. al. 1992.
- Fortenbaugh, W.W., "Theophrastus and Strato on Animal Intelligence", in Desclos / Fortenbaugh 2011, 399-412.
- Hellmann, O., "Clearchus and Peripatetic Research on Aquatic Creatures", in D. Mirhady (Ed.), Clearchus of Soloi. Text, Translation, and Discussion, forthcoming.
- Kapetanaki, S., R. Sharples (Eds.), Pseudo-Aristoteles (Pseudo-Alexander), Supplementa problematorum. A New Edition of the Greek Text with Introduction and Annotated Translation, Berlin et. al. 2006.
- Moraux, P., Les listes anciennes des ouvrages d'Aristote, Louvain 1951.
- Sharples, R.W., Theophrastus: On Fish, in: W.W. Fortenbaugh, D. Gutas (Eds.), Theophrastus. His Psychological, Doxographical and Scientific Writings, New Brunswick/London 1992, 347-385.
- Sharples, R.W., Theophrastus of Eresus. Sources for his Life, Writings, Thought and Influence, Commentary Vol. 5: Sources on Biology, Leiden et al. 1995.
- Sharples, R.W., "Strato of Lampsacus. The Sources, Texts and Translation," in Desclos / Fortenbaugh 2011 in: M.-L. Desclos, W.W. Fortenbaugh (Eds.), Strato of Lampsacus. Text
- Sorabji, R., Animal Minds & Human Morals. The Origins of the Western Debate, London 1993.
- Wehrli, F., Die Schule des Aristoteles. Texte und Kommentar. Heft VIII: Eudemos von Rhodos, Basel / Stuttgart ²1969.
- White, S.A., "Eudemus the Naturalist", in: I. Bodnár, W.W. Fortenbaugh (Eds.), Eudemus of Rhodes (Rutgers University Studies in Classical Humanities XI), New Brunswick (U.S.A.) / London (U.K.), 2002, 207-241.
- Zucker, A. (Ed.), Élien, La personnalité des animaux, traduit et commenté, livres I-IX, Paris 2001.