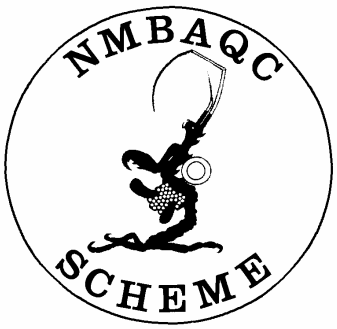


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# Ring Test Bulletin – RTB#36

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unicomarine

**RING TEST DETAILS**
**Ring Test #36**
**Type/Contents – Targeted; 'Gastropods'**
**Circulated – 02/02/2009**
**Completion Date – 27/03/2009**
**Number of Subscribing Laboratories – 27**
**Number of Participating Laboratories – 25**
**Number of Results Received – 30***
***multiple data entries per laboratory permitted**

**Summary of differences**

| Specimen | Genus | Species | Total differences for 30 returns | |
|---|---|---|---|---|
| | | | Genus | Species |
| RT3601 | *Skeneopsis* | *planorbis* | 1 | 1 |
| RT3602 | *Chrysallida* | *sarsi* | 1 | 28 |
| RT3603 | *Acanthodoris* | *pilosa* | 0 | 0 |
| RT3604 | *Crepidula* | *fornicata* | 10 | 10 |
| RT3605 | *Potamopyrgus* | *antipodarum* | 22 | 22 |
| RT3606 | *Hyala* | *vitrea* | 23 | 23 |
| RT3607 | *Ventrosia* | *ventrosa* | 20 | 20 |
| RT3608 | *Hyala* | *vitrea* | 4 | 4 |
| RT3609 | *Onoba* | *aculeus* | 26 | 26 |
| RT3610 | *Cylichnina* | *umbilicata* | 14 | 14 |
| RT3611 | *Chrysallida* | *fenestrata* | 3 | 4 |
| RT3612 | *Onoba* | *aculeus* | 2 | 4 |
| RT3613 | *Hydrobia* | *ulvae* | 6 | 6 |
| RT3614 | *Vitreolina* | *philippi* | 4 | 7 |
| RT3615 | *Gibbula* | *cineraria* | 1 | 16 |
| RT3616 | *Bittium* | *reticulatum* | 1 | 1 |
| RT3617 | *Lacuna* | *vincta* | 7 | 13 |
| RT3618 | *Omalogyra* | *atomus* | 1 | 1 |
| RT3619 | *Hydrobia* | *ulvae* | 12 | 12 |
| RT3620 | *Rissoa* | *parva* var. interrupta | 7 | 8 |
| RT3621 | *Radix* | *balthica* | 4 | 4 |
| RT3622 | *Crisilla* | *semistriata* | 11 | 11 |
| RT3623 | *Potamopyrgus* | *antipodarum* | 1 | 1 |
| RT3624 | *Potamopyrgus* | *antipodarum* | 7 | 7 |
| RT3625 | *Mercuria* | *confusa* | 5 | 5 |
| | | Total differences | 193 | 248 |
| | | Average differences /lab. | 6.4 | 8.3 |

**Table 1. The identification of fauna made by participating laboratories for RT36 (arranged by specimen). Names are given only where different from the AQC identification.**

| | RT3601 | RT3602 | RT3603 | RT3604 | RT3605 | RT3606 |
|---|---|---|---|---|---|---|
| **Taxon** | ***Skeneopsis planorbis*** | ***Chrysallida sarsi*** | ***Acanthodoris pilosa*** | ***Crepidula fornicata*** | ***Potamopyrgus antipodarum*** | ***Hyala vitrea*** |
| **LB1501** | - - | - decussata | - - | - - | - - | Odostomia eulimoides |
| **LB1503** | - - | - obtusa | - - | - - | Brachystomia Spp. | Ondina diaphana |
| **LB1504** | - - | - decussata | - - | Calyptraea chinensis | Ventrosia ventrosa | - - |
| **LB1505a** | - - | - indistincta | - - | - - | - - | - - |
| **LB1505b** | - - | - decussata | - - | - - | Mercuria confusa | - - |
| **LB1506** | - - | [Partulida] spiralis | - - | velutina velutina | Assiminea grayana | Rissoella diaphana |
| **LB1507** | - - | - obtusata | [Acanthodorus] - | Velutina velutina | Hydrobia ulvae | - - |
| **LB1508** | - - | - - | - - | - - | Ventrosia ventrosa | - - |
| **LB1509** | - - | - decussata | - - | - - | Pseudamnicola confusa | Rissoella diaphana |
| **LB1510** | - - | - interstincta | - - | - - | Hydrobia ulvae | Ondina diaphana |
| **LB1511** | Margarites helicinus | [Partulida] pellucida | - - | Calyptraea chinensis | Hydrobia neglecta | Rissoella diaphana |
| **LB1512** | - - | Rissoella diaphana | - - | - - | Hydrobia ulvae | Rissoella diaphana |
| **LB1513** | - - | - indestincta | - - | - - | Ventrosia ventrosa | Rissoella diaphana |
| **LB1514a** | - - | - decussata | - - | - - | Assiminea grayana | Ondina diaphana |
| **LB1514b** | - - | - decussata | - - | - - | Assiminea grayana | Rissoella opalina |
| **LB1514c** | - - | - decussata | - - | - - | Assiminea grayana | Ondina diaphana |
| **LB1515** | - - | [Chrysalida] indistincta | - - | - - | - - | Rissoella diaphana |
| **LB1516** | - - | - decussata | - - | - - | Assiminea grayana | Rissoella diaphana |
| **LB1519** | - - | - - | - - | - - | Ventrosia ventrosa | - - |
| **LB1520** | - - | - interstincta | - - | Capulus ungaricus | Pseudamnicola confusa | ? ? |
| **LB1521a** | - - | - decussata | - - | Tectura virginea | - - | Rissoella (Jeffreysina) opalina |
| **LB1521b** | - - | - decussata | - - | Tectura virginea | - - | Rissoella (Jeffreysina) opalina |
| **LB1522** | - - | - interstincta (obtusa) | - - | - - | Rissoella diaphana | Rissoella opalina |
| **LB1523** | - - | - interstincta | - - | - - | Rissoella globularis | Rissoella opalina |
| **LB1524** | - - | - interstincta | - - | Velutina velutina | Marstoniopsis scholtzi | Obtusella intersecta |
| **LB1525a** | - - | - obtusa | - - | - - | Rissoella opalina | Rissoella diaphana |
| **LB1525b** | - - | - interstincta | - - | - - | [Pomatopyrgus] - | Rissoella diaphana |
| **LB1535** | - [planorbia] | - interstincta | - - | - - | Ventrosia ventrosa | Rissoella opalina |
| **LB1536** | - - | - spiralis | - - | Calyptraea chinensis | - [jenkinsi] | Rissoella opalina |
| **LB1537** | - - | - spiralis | - - | Aplysia punctata | - - | - - |

**Table 1. The identification of fauna made by participating laboratories for RT36 (arranged by specimen). Names are given only where different from the AQC identification.**

| | RT3607 | RT3608 | RT3609 | RT3610 | RT3611 | RT3612 | RT3613 |
|---|---|---|---|---|---|---|---|
| **Taxon** | ***Ventrosia ventrosa*** | ***Hyala vitrea*** | ***Onoba aculeus*** | ***Cylichnina umbilicata*** | ***Chrysallida fenestrata*** | ***Onoba aculeus*** | ***Hydrobia ulvae*** |
| **LB1501** | - - | - - | Ondina divisa | Retusa truncatula | - - | - - | - - |
| **LB1503** | Hydrobia ulva | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - [ulva] |
| **LB1504** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - - |
| **LB1505a** | - - | [Hyale] - | - - | Cylichna alba | [Tragula] - | - - | - - |
| **LB1505b** | - - | [Hyale] - | - - | Cylichna alba | [Tragula] - | - - | - - |
| **LB1506** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - - |
| **LB1507** | Brachystomia rissoides | - - | Obtusella intersecta | Cylichna cylindracea | [Tragula] - | - - | - - |
| **LB1508** | - - | - - | - - | [Retusa] - | [Tragula] - | - - | - - |
| **LB1509** | [Hydrobia] - | Ondina diaphana | Obtusella intersecta | - - | - - | - - | - - |
| **LB1510** | Hydrobia ulvae | - - | Pusillina inconspicua | [Retusa] - | [Tragula] - | - semicostata | - - |
| **LB1511** | - - | - - | Obtusella intersecta | Retusa truncatula | [Tragula] - | - - | - - |
| **LB1512** | Pseudamnicola confusa | Hydrobia neglecta | Rissoella diaphana | Retusa truncatula | [Tragula] - | - - | - - |
| **LB1513** | Hydrobia ulvae | - - | Pusillina inconspicua | [Retusa] - | [Tragula] - | - - | - - |
| **LB1514a** | Hydrobia ulvae | - - | Pusillina sarsa | Cylichna alba | Graphis albida | - semicostata | - - |
| **LB1514b** | Hydrobia ulvae | - - | Obtusella intersecta | Cylichna alba | [Tragula] - | Ceratia proxima | - - |
| **LB1514c** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - - |
| **LB1515** | [Hydrobia] - | [Hyalea] - | Obtusella intersecta | Retusa truncatula | [Tragula] - | - - | - - |
| **LB1516** | Pseudoamnicola confusa | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | Ventrosia ventrosa |
| **LB1519** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - - |
| **LB1520** | - - | - - | Rissoella diaphana | Retusa truncatulata | - - | - - | - - |
| **LB1521a** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | Ventrosia ventrosa |
| **LB1521b** | Hydrobia neglecta | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | Ventrosia ventrosa |
| **LB1522** | Hydrobia ulvae | - - | - - | Retusa obtusa | - terebellum | - - | Melanella alba |
| **LB1523** | Hyala vitrea | Hydrobia neglecta | Rissoella diaphana | Cylichna cylindracea | - - | - - | Barleeia unifasciata |
| **LB1524** | [Hydrobia] - | - - | Obtusella intersecta | Retusa truncatula | [Tragula] - | - - | Rissoa membranacea |
| **LB1525a** | Hydrobia ulvae | - - | Obtusella intersecta | [Retusa] - | [Tragula] - | - - | - - |
| **LB1525b** | Hydrobia ulvae | - - | Obtusella intersecta | - - | - - | - - | - - |
| **LB1535** | - - | - - | Obtusella intersepta | [Retusa] - | [Tragula] - | - - | [Peringia] - |
| **LB1536** | Hydrobia neglecta | Rissoa membranacea | Rissoella opalina | Retusa truncatula | Bittium reticulatum | Hydrobia neglecta | - - |
| **LB1537** | Hydrobia neglecta | - - | Chrysallida sarsi | [Retusa] - | Turbonilla lactea | - - | [Peringia] - |

**Table 1. The identification of fauna made by participating laboratories for RT36 (arranged by specimen). Names are given only where different from the AQC identification.**

| | RT3614 | RT3615 | RT3616 | RT3617 | RT3618 | RT3619 |
|---|---|---|---|---|---|---|
| **Taxon** | ***Vitreolina philippi*** | ***Gibbula cineraria*** | ***Bittium reticulatum*** | ***Lacuna vincta*** | ***Omalogyra atomus*** | ***Hydrobia ulvae*** |
| **LB1501** | Melanella alba | - - | - - | Littorina neglecta | - - | Lacuna parva |
| **LB1503** | - [philippii] | Calliostoma Spp | - - | Rissoella opalina | - - | - [ulva] |
| **LB1504** | - - | - tumida | - - | Eatonina fulgida | [Omaloyra] - | - - |
| **LB1505a** | [Crinophtheiros] collinsi | [Gibbula (Steromphala)] - | - - | [Lacuna (Epheria)] - | - - | - - |
| **LB1505b** | [Crinophtheiros] collinsi | [Gibbula (Steromphala)] - | - - | [Lacuna (Epheria)] - | - - | - - |
| **LB1506** | - collinsi | - tumida | - - | Cingulopsis fulgida | - [atomis] | Paludinella litorina |
| **LB1507** | - [philippii] | - [cinnerea] | - - | Cingulopsis fulgida | - - | - - |
| **LB1508** | - [philippii] | - tumida | - - | Eatonina fulgida | - - | - - |
| **LB1509** | - - | - - | - - | - parva | - - | - - |
| **LB1510** | - - | - - | - - | - - | Ammonicerina rota | - - |
| **LB1511** | - - | - tumida | - - | - - | - - | Odostomia acuta var. umbilicaris |
| **LB1512** | Melanella frielei | - - | - - | - - | - - | - - |
| **LB1513** | - [phillippii] | - tumida | - - | - - | - - | - - |
| **LB1514a** | - - | - - | - - | - - | - - | Assiminea grayana |
| **LB1514b** | - - | - tumida | - - | - - | - - | Assiminea grayana |
| **LB1514c** | - - | - - | - - | - - | - - | Assiminea grayana |
| **LB1515** | - - | - - | Cerithiopsis metaxa | - - | - - | Potamopyrgus antipodarum |
| **LB1516** | - - | - tumida | - - | - - | - - | - - |
| **LB1519** | - - | - - | - - | - - | - - | - - |
| **LB1520** | - - | - tumida | - - | - - | - - | Assiminea grayana |
| **LB1521a** | - - | - umbilicalis | [Bittium (Bittium)] - | [Lacuna (Epheria)] - | - - | - - |
| **LB1521b** | - - | - tumida | [Bittium (Bittium)] - | [Lacuna (Epheria)] - | - - | - - |
| **LB1522** | Polygireulima polita | - tumida | - - | - parva | - - | - - |
| **LB1523** | - - | - - | - - | - parva | - - | Rissoella opalina |
| **LB1524** | - - | - tumida | - - | - parva | - - | Rissoella opalina |
| **LB1525a** | - [philippii] | - - | - - | - parva | - - | Rissoella opalina |
| **LB1525b** | - - | - - | - - | - parva | - - | - - |
| **LB1535** | - [phillipi] | - umbilicus | - - | - - | - - | [Peringia] - |
| **LB1536** | - [philippii] | - umbilicalis | - - | - - | - - | Rissoella opalina |
| **LB1537** | Eulima bilineata | - umbilicalis | - [reticululatum] | ? ? | - - | [Peringia] - |

**Table 1. The identification of fauna made by participating laboratories for RT36 (arranged by specimen). Names are given only where different from the AQC identification.**

| | RT3620 | RT3621 | RT3622 | RT3623 | RT3624 | RT3625 |
|---|---|---|---|---|---|---|
| **Taxon** | ***Rissoa parva* var. interrupta** | ***Radix balthica*** | ***Crisilla semistriata*** | ***Potamopyrgus antipodarum*** | ***Potamopyrgus antipodarum*** | ***Mercuria confusa*** |
| **LB1501** | Cingula trifasciata | Cryptonatica affinis | - - | - - | - - | - - |
| **LB1503** | Pusillina inconspicua | [Lymnaea] [peregra] | Onoba semicostata | - - | Hydrobia neglecta | Hydrobia ventrosa |
| **LB1504** | - [interrupta] | [Lymnaea] [peregra] | Hydrobia ulvae | - - | - - | - - |
| **LB1505a** | - [parva] | [Lymnaea] [peregra] | [Alvania (Crisilla)] - | - - | - - | - - |
| **LB1505b** | - [parva] | [Lymnaea] [peregra] | [Alvania (Crisilla)] - | - - | - - | - - |
| **LB1506** | Hydrobia neglecta | [Lymnaea] [peregra] | Pusillina inconspicua | - [jenkinsi] | - [jenkinsi] | Ventrosia ventrosa |
| **LB1507** | Hydrobia ulvae | [Lymnaea] [peregra] | Rissoa parva | [Potompygurus] [jenkinsi] | Hydrobia neglecta | Hydrobia ventrosa |
| **LB1508** | - [interrupta] | Succinea putris | - - | - - | - - | [Pseudamnicola] - |
| **LB1509** | - - | [Lymnaea] [peregra] | - - | - - | - - | Rissoella opalina |
| **LB1510** | - [interrupta] | [Lymnaea] [peregra] | [Alvania] - | - - | Hydrobia ulvae | - - |
| **LB1511** | - [interrupta] | [Lymnaea] [peregra] | Rissoa porifera | - - | - - | [Pseudamnicola ] - |
| **LB1512** | Barleeia unfasciata | [Lymnaea] [peregra] | Liostomia clavula | - - | Hydrobia neglecta | [Pseudamnicola] - |
| **LB1513** | - - | [Lymnaea] [peregra] | Hydrobia ulvae | - - | - - | Bithynia leachi |
| **LB1514a** | - [interrupta] | - - | [Alvania] - | - - | - - | [Pseudamnicola] - |
| **LB1514b** | - [interrupta] | - - | [Alvania] - | - - | - - | [Pseudamnicola] - |
| **LB1514c** | - [interrupta] | - - | [Alvania] - | - - | - - | [Pseudamnicola] - |
| **LB1515** | [Rissostomia] membranacea | [Lymnaea] [peregra] | [Alvania] - | - - | - - | - [cf. similis] |
| **LB1516** | - [interrupta] | [Lymnaea] [pereger] | [Alvania] - | - - | - - | [Pseudoamnicola] - |
| **LB1519** | - [interrupta] | [Lymnaea] [peregra] | [Alvania] - | - - | - - | [Pseudamnicola] - |
| **LB1520** | - - | - - | Hydrobia ulvae | - - | - - | [Pseudamnicola] - |
| **LB1521a** | - [interrupta] | - - | [Alvania (Crisilla)] - | - - | - - | [Pseudoamnicola] - |
| **LB1521b** | Pusillina inconspicua | - - | [Alvania (Crisilla)] - | - - | - - | - - |
| **LB1522** | - [interrupta] | [Lymnea] [peregra] | Hydrobia ulvae | - - | Ventrosia ventrosa | [Pseudamnicola] - |
| **LB1523** | - - | Amauropsis islandica | - - | - - | - - | - - |
| **LB1524** | - - | [Limnaea] [peregra] | Cingula trifasciata | - - | Hydrobia ulvae | [Pseudamnicola] - |
| **LB1525a** | - - | [Lymnaea] [peregra] | [Alvania] - | - [jenkinsi] | - [jenkinsi] | [Pseudamnicola] - |
| **LB1525b** | - - | [Limnea] [peregra] | - - | [Pomatopyrgus] - | [Pomatopyrgus] - | - - |
| **LB1535** | - [parva] | [Lymnaea] [peregra] | [Alvania] - | - - | - - | - [cf. similis] |
| **LB1536** | - - | Lacuna crassior | Hydrobia ulvae | Hydrobia ventrosa | Hydrobia ventrosa | - - |
| **LB1537** | Peringia ulvae | - [ovata] | [Alvania] - | - - | - - | - - |

**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1501 | LB1503 | LB1504 | LB1505a | LB1505b |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | - - | - - | - - | - - | - - |
| RT3602 | *Chrysallida sarsi* | - decussata | - obtusa | - decussata | - indistincta | - decussata |
| RT3603 | *Acanthodoris pilosa* | - - | - - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | - - | - - | Calyptraea chinensis | - - | - - |
| RT3605 | *Potamopyrgus antipodarum* | - - | Brachystomia Spp. | Ventrosia ventrosa | - - | Mercuria confusa |
| RT3606 | *Hyala vitrea* | Odostomia eulimoides | Ondina diaphana | - - | - - | - - |
| RT3607 | *Ventrosia ventrosa* | - - | Hydrobia ulva | Hydrobia ulvae | - - | - - |
| RT3608 | *Hyala vitrea* | - - | - - | - - | [Hyale] - | [Hyale] - |
| RT3609 | *Onoba aculeus* | Ondina divisa | Obtusella intersecta | Obtusella intersecta | - - | - - |
| RT3610 | *Cylichnina umbilicata* | Retusa truncatula | [Retusa] - | [Retusa] - | Cylichna alba | Cylichna alba |
| RT3611 | *Chrysallida fenestrata* | - - | [Tragula] - | [Tragula] - | [Tragula] - | [Tragula] - |
| RT3612 | *Onoba aculeus* | - - | - - | - - | - - | - - |
| RT3613 | *Hydrobia ulvae* | - - | - [ulva] | - - | - - | - - |
| RT3614 | *Vitreolina philippi* | Melanella alba | - [philippii] | - - | [Crinophtheiros] collinsi | [Crinophtheiros] collinsi |
| RT3615 | *Gibbula cineraria* | - - | Calliostoma Spp | - tumida | [Gibbula (Steromphala)] - | [Gibbula (Steromphala)] - |
| RT3616 | *Bittium reticulatum* | - - | - - | - - | - - | - - |
| RT3617 | *Lacuna vincta* | Littorina neglecta | Rissoella opalina | Eatonina fulgida | [Lacuna (Epheria)] - | [Lacuna (Epheria)] - |
| RT3618 | *Omalogyra atomus* | - - | - - | [Omaloyra] - | - - | - - |
| RT3619 | *Hydrobia ulvae* | Lacuna parva | - [ulva] | - - | - - | - - |
| RT3620 | *Rissoa parva* var. interrupta | Cingula trifasciata | Pusillina inconspicua | - [interrupta] | - [parva] | - [parva] |
| RT3621 | *Radix balthica* | Cryptonatica affinis | [Lymnaea] [peregra] | [Lymnaea] [peregra] | [Lymnaea] [peregra] | [Lymnaea] [peregra] |
| RT3622 | *Crisilla semistriata* | - - | Onoba semicostata | Hydrobia ulvae | [Alvania (Crisilla)] - | [Alvania (Crisilla)] - |
| RT3623 | *Potamopyrgus antipodarum* | - - | - - | - - | - - | - - |
| RT3624 | *Potamopyrgus antipodarum* | - - | Hydrobia neglecta | - - | - - | - - |
| RT3625 | *Mercuria confusa* | - - | Hydrobia ventrosa | - - | - - | - - |

**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1506 | LB1507 | LB1508 | LB1509 | LB1510 |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | - - | - - | - - | - - | - - |
| RT3602 | *Chrysallida sarsi* | [Partulida] spiralis | - obtusata | - - | - decussata | - interstincta |
| RT3603 | *Acanthodoris pilosa* | - - | [Acanthodorus] - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | velutina velutina | Velutina velutina | - - | - - | - - |
| RT3605 | *Potamopyrgus antipodarum* | Assiminea grayana | Hydrobia ulvae | Ventrosia ventrosa | Pseudamnicola confusa | Hydrobia ulvae |
| RT3606 | *Hyala vitrea* | Rissoella diaphana | - - | - - | Rissoella diaphana | Ondina diaphana |
| RT3607 | *Ventrosia ventrosa* | Hydrobia ulvae | Brachystomia rissoides | - - | [Hydrobia] - | Hydrobia ulvae |
| RT3608 | *Hyala vitrea* | - - | - - | - - | Ondina diaphana | - - |
| RT3609 | *Onoba aculeus* | Obtusella intersecta | Obtusella intersecta | - - | Obtusella intersecta | Pusillina inconspicua |
| RT3610 | *Cylichnina umbilicata* | [Retusa] - | Cylichna cylindracea | [Retusa] - | - - | [Retusa] - |
| RT3611 | *Chrysallida fenestrata* | [Tragula] - | [Tragula] - | [Tragula] - | - - | [Tragula] - |
| RT3612 | *Onoba aculeus* | - - | - - | - - | - - | - semicostata |
| RT3613 | *Hydrobia ulvae* | - - | - - | - - | - - | - - |
| RT3614 | *Vitreolina philippi* | - collinsi | - [philippii] | - [philippii] | - - | - - |
| RT3615 | *Gibbula cineraria* | - tumida | - [cinnerea] | - tumida | - - | - - |
| RT3616 | *Bittium reticulatum* | - - | - - | - - | - - | - - |
| RT3617 | *Lacuna vincta* | Cingulopsis fulgida | Cingulopsis fulgida | Eatonina fulgida | - parva | - - |
| RT3618 | *Omalogyra atomus* | - [atomis] | - - | - - | - - | Ammonicerina rota |
| RT3619 | *Hydrobia ulvae* | Paludinella litorina | - - | - - | - - | - - |
| RT3620 | *Rissoa parva* var. interrupta | Hydrobia neglecta | Hydrobia ulvae | - [interrupta] | - - | - [interrupta] |
| RT3621 | *Radix balthica* | [Lymnaea] [peregra] | [Lymnaea] [peregra] | Succinea putris | [Lymnaea] [peregra] | [Lymnaea] [peregra] |
| RT3622 | *Crisilla semistriata* | Pusillina inconspicua | Rissoa parva | - - | - - | [Alvania] - |
| RT3623 | *Potamopyrgus antipodarum* | - [jenkinsi] | [Potompygurus] [jenkinsi] | - - | - - | - - |
| RT3624 | *Potamopyrgus antipodarum* | - [jenkinsi] | Hydrobia neglecta | - - | - - | Hydrobia ulvae |
| RT3625 | *Mercuria confusa* | Ventrosia ventrosa | Hydrobia ventrosa | [Pseudamnicola] - | Rissoella opalina | - - |

**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1511 | LB1512 | LB1513 | LB1514a | LB1514b |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | Margarites helicinus | - - | - - | - - | - - |
| RT3602 | *Chrysallida sarsi* | [Partulida] pellucida | Rissoella diaphana | - indestincta | - decussata | - decussata |
| RT3603 | *Acanthodoris pilosa* | - - | - - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | Calyptraea chinensis | - - | - - | - - | - - |
| RT3605 | *Potamopyrgus antipodarum* | Hydrobia neglecta | Hydrobia ulvae | Ventrosia ventrosa | Assiminea grayana | Assiminea grayana |
| RT3606 | *Hyala vitrea* | Rissoella diaphana | Rissoella diaphana | Rissoella diaphana | Ondina diaphana | Rissoella opalina |
| RT3607 | *Ventrosia ventrosa* | - - | Pseudamnicola confusa | Hydrobia ulvae | Hydrobia ulvae | Hydrobia ulvae |
| RT3608 | *Hyala vitrea* | - - | Hydrobia neglecta | - - | - - | - - |
| RT3609 | *Onoba aculeus* | Obtusella intersecta | Rissoella diaphana | Pusillina inconspicua | Pusillina sarsa | Obtusella intersecta |
| RT3610 | *Cylichnina umbilicata* | Retusa truncatula | Retusa truncatula | [Retusa] - | Cylichna alba | Cylichna alba |
| RT3611 | *Chrysallida fenestrata* | [Tragula] - | [Tragula] - | [Tragula] - | Graphis albida | [Tragula] - |
| RT3612 | *Onoba aculeus* | - - | - - | - - | - semicostata | Ceratia proxima |
| RT3613 | *Hydrobia ulvae* | - - | - - | - - | - - | - - |
| RT3614 | *Vitreolina philippi* | - - | Melanella frielei | - [phillippii] | - - | - - |
| RT3615 | *Gibbula cineraria* | - tumida | - - | - tumida | - - | - tumida |
| RT3616 | *Bittium reticulatum* | - - | - - | - - | - - | - - |
| RT3617 | *Lacuna vincta* | - - | - - | - - | - - | - - |
| RT3618 | *Omalogyra atomus* | - - | - - | - - | - - | - - |
| RT3619 | *Hydrobia ulvae* | Odostomia acuta var. umbilicaris | - - | - - | Assiminea grayana | Assiminea grayana |
| RT3620 | *Rissoa parva* var. interrupta | - [interrupta] | Barleeia unfasciata | - - | - [interrupta] | - [interrupta] |
| RT3621 | *Radix balthica* | [Lymnaea] [peregra] | [Lymnaea] [peregra] | [Lymnaea] [peregra] | - - | - - |
| RT3622 | *Crisilla semistriata* | Rissoa porifera | Liostomia clavula | Hydrobia ulvae | [Alvania] - | [Alvania] - |
| RT3623 | *Potamopyrgus antipodarum* | - - | - - | - - | - - | - - |
| RT3624 | *Potamopyrgus antipodarum* | - - | Hydrobia neglecta | - - | - - | - - |
| RT3625 | *Mercuria confusa* | [Pseudamnicola ] - | [Pseudamnicola] - | Bithynia leachi | [Pseudamnicola] - | [Pseudamnicola] - |

**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1514c | LB1515 | LB1516 | LB1519 | LB1520 |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | - - | - - | - - | - - | - - |
| RT3602 | *Chrysallida sarsi* | - decussata | [Chrysalida] indistincta | - decussata | - - | - interstincta |
| RT3603 | *Acanthodoris pilosa* | - - | - - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | - - | - - | - - | - - | Capulus ungaricus |
| RT3605 | *Potamopyrgus antipodarum* | Assiminea grayana | - - | Assiminea grayana | Ventrosia ventrosa | Pseudamnicola confusa |
| RT3606 | *Hyala vitrea* | Ondina diaphana | Rissoella diaphana | Rissoella diaphana | - - | ? ? |
| RT3607 | *Ventrosia ventrosa* | Hydrobia ulvae | [Hydrobia] - | Pseudoamnicola confusa | Hydrobia ulvae | - - |
| RT3608 | *Hyala vitrea* | - - | [Hyalea] - | - - | - - | - - |
| RT3609 | *Onoba aculeus* | Obtusella intersecta | Obtusella intersecta | Obtusella intersecta | Obtusella intersecta | Rissoella diaphana |
| RT3610 | *Cylichnina umbilicata* | [Retusa] - | Retusa truncatula | [Retusa] - | [Retusa] - | Retusa truncatulata |
| RT3611 | *Chrysallida fenestrata* | [Tragula] - | [Tragula] - | [Tragula] - | [Tragula] - | - - |
| RT3612 | *Onoba aculeus* | - - | - - | - - | - - | - - |
| RT3613 | *Hydrobia ulvae* | - - | - - | Ventrosia ventrosa | - - | - - |
| RT3614 | *Vitreolina philippi* | - - | - - | - - | - - | - - |
| RT3615 | *Gibbula cineraria* | - - | - - | - tumida | - - | - tumida |
| RT3616 | *Bittium reticulatum* | - - | Cerithiopsis metaxa | - - | - - | - - |
| RT3617 | *Lacuna vincta* | - - | - - | - - | - - | - - |
| RT3618 | *Omalogyra atomus* | - - | - - | - - | - - | - - |
| RT3619 | *Hydrobia ulvae* | Assiminea grayana | Potamopyrgus antipodarum | - - | - - | Assiminea grayana |
| RT3620 | *Rissoa parva* var. interrupta | - [interrupta] | [Rissostomia] membranacea | - [interrupta] | - [interrupta] | - - |
| RT3621 | *Radix balthica* | - - | [Lymnaea] [peregra] | [Lymnaea] [pereger] | [Lymnaea] [peregra] | - - |
| RT3622 | *Crisilla semistriata* | [Alvania] - | [Alvania] - | [Alvania] - | [Alvania] - | Hydrobia ulvae |
| RT3623 | *Potamopyrgus antipodarum* | - - | - - | - - | - - | - - |
| RT3624 | *Potamopyrgus antipodarum* | - - | - - | - - | - - | - - |
| RT3625 | *Mercuria confusa* | [Pseudamnicola] - | - [cf. similis] | [Pseudoamnicola] - | [Pseudamnicola] - | [Pseudamnicola] - |

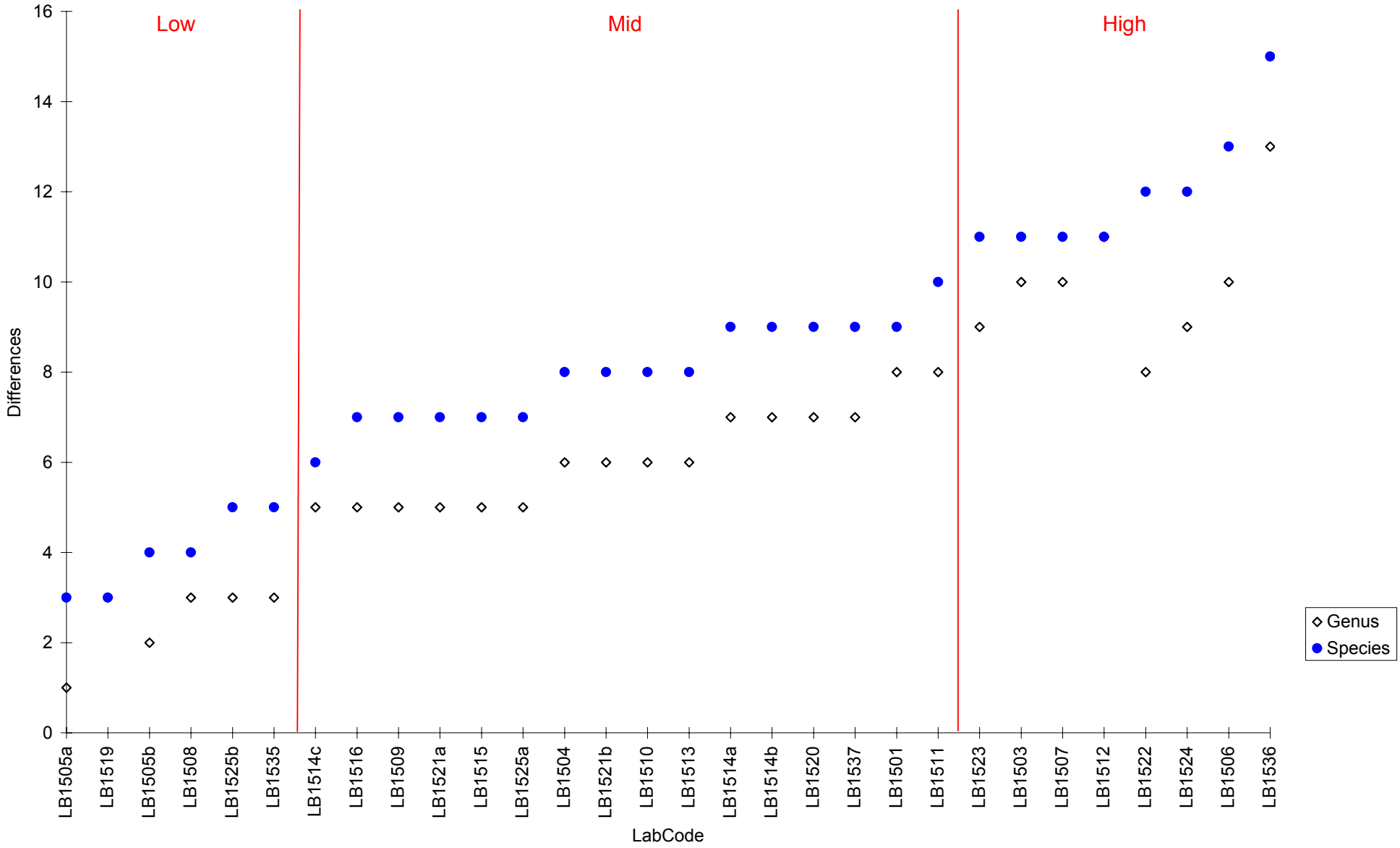
**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1521a | LB1521b | LB1522 | LB1523 | LB1524 |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | - - | - - | - - | - - | - - |
| RT3602 | *Chrysallida sarsi* | - decussata | - decussata | - interstincta (obtusa) | - interstincta | - interstincta |
| RT3603 | *Acanthodoris pilosa* | - - | - - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | Tectura virginea | Tectura virginea | - - | - - | Velutina velutina |
| RT3605 | *Potamopyrgus antipodarum* | - - | - - | Rissoella diaphana | Rissoella globularis | Marstoniopsis scholtzi |
| RT3606 | *Hyala vitrea* | Rissoella (Jeffreysina) opalina | Rissoella (Jeffreysina) opalina | Rissoella opalina | Rissoella opalina | Obtusella intersecta |
| RT3607 | *Ventrosia ventrosa* | Hydrobia ulvae | Hydrobia neglecta | Hydrobia ulvae | Hyala vitrea | [Hydrobia] - |
| RT3608 | *Hyala vitrea* | - - | - - | - - | Hydrobia neglecta | - - |
| RT3609 | *Onoba aculeus* | Obtusella intersecta | Obtusella intersecta | - - | Rissoella diaphana | Obtusella intersecta |
| RT3610 | *Cylichnina umbilicata* | [Retusa] - | [Retusa] - | Retusa obtusa | Cylichna cylindracea | Retusa truncatula |
| RT3611 | *Chrysallida fenestrata* | [Tragula] - | [Tragula] - | - terebellum | - - | [Tragula] - |
| RT3612 | *Onoba aculeus* | - - | - - | - - | - - | - - |
| RT3613 | *Hydrobia ulvae* | Ventrosia ventrosa | Ventrosia ventrosa | Melanella alba | Barleeia unifasciata | Rissoa membranacea |
| RT3614 | *Vitreolina philippi* | - - | - - | Polygireulima polita | - - | - - |
| RT3615 | *Gibbula cineraria* | - umbilicalis | - tumida | - tumida | - - | - tumida |
| RT3616 | *Bittium reticulatum* | [Bittium (Bittium)] - | [Bittium (Bittium)] - | - - | - - | - - |
| RT3617 | *Lacuna vincta* | [Lacuna (Epheria)] - | [Lacuna (Epheria)] - | - parva | - parva | - parva |
| RT3618 | *Omalogyra atomus* | - - | - - | - - | - - | - - |
| RT3619 | *Hydrobia ulvae* | - - | - - | - - | Rissoella opalina | Rissoella opalina |
| RT3620 | *Rissoa parva* var. interrupta | - [interrupta] | Pusillina inconspicua | - [interrupta] | - - | - - |
| RT3621 | *Radix balthica* | - - | - - | [Lymnea] [peregra] | Amauropsis islandica | [Limnaea] [peregra] |
| RT3622 | *Crisilla semistriata* | [Alvania (Crisilla)] - | [Alvania (Crisilla)] - | Hydrobia ulvae | - - | Cingula trifasciata |
| RT3623 | *Potamopyrgus antipodarum* | - - | - - | - - | - - | - - |
| RT3624 | *Potamopyrgus antipodarum* | - - | - - | Ventrosia ventrosa | - - | Hydrobia ulvae |
| RT3625 | *Mercuria confusa* | [Pseudoamnicola] - | - - | [Pseudamnicola] - | - - | [Pseudamnicola] - |

**Table 2. The identification of fauna made by participating laboratories for RT36 (arranged by participant). Names are given only where different from the AQC identifcation.**

| | Taxon | LB1525a | LB1525b | LB1535 | LB1536 | LB1537 |
|---|---|---|---|---|---|---|
| RT3601 | *Skeneopsis planorbis* | - - | - - | - [planorbia] | - - | - - |
| RT3602 | *Chrysallida sarsi* | - obtusa | - interstincta | - interstincta | - spiralis | - spiralis |
| RT3603 | *Acanthodoris pilosa* | - - | - - | - - | - - | - - |
| RT3604 | *Crepidula fornicata* | - - | - - | - - | Calyptraea chinensis | Aplysia punctata |
| RT3605 | *Potamopyrgus antipodarum* | Rissoella opalina | [Pomatopyrgus] - | Ventrosia ventrosa | - [jenkinsi] | - - |
| RT3606 | *Hyala vitrea* | Rissoella diaphana | Rissoella diaphana | Rissoella opalina | Rissoella opalina | - - |
| RT3607 | *Ventrosia ventrosa* | Hydrobia ulvae | Hydrobia ulvae | - - | Hydrobia neglecta | Hydrobia neglecta |
| RT3608 | *Hyala vitrea* | - - | - - | - - | Rissoa membranacea | - - |
| RT3609 | *Onoba aculeus* | Obtusella intersecta | Obtusella intersecta | Obtusella intersepta | Rissoella opalina | Chrysallida sarsi |
| RT3610 | *Cylichnina umbilicata* | [Retusa] - | - - | [Retusa] - | Retusa truncatula | [Retusa] - |
| RT3611 | *Chrysallida fenestrata* | [Tragula] - | - - | [Tragula] - | Bittium reticulatum | Turbonilla lactea |
| RT3612 | *Onoba aculeus* | - - | - - | - - | Hydrobia neglecta | - - |
| RT3613 | *Hydrobia ulvae* | - - | - - | [Peringia] - | - - | [Peringia] - |
| RT3614 | *Vitreolina philippi* | - [philippii] | - - | - [phillipi] | - [philippii] | Eulima bilineata |
| RT3615 | *Gibbula cineraria* | - - | - - | - umbilicus | - umbilicalis | - umbilicalis |
| RT3616 | *Bittium reticulatum* | - - | - - | - - | - - | - [reticululatum] |
| RT3617 | *Lacuna vincta* | - parva | - parva | - - | - - | ? ? |
| RT3618 | *Omalogyra atomus* | - - | - - | - - | - - | - - |
| RT3619 | *Hydrobia ulvae* | Rissoella opalina | - - | [Peringia] - | Rissoella opalina | [Peringia] - |
| RT3620 | *Rissoa parva* var. interrupta | - - | - - | - [parva] | - - | Peringia ulvae |
| RT3621 | *Radix balthica* | [Lymnaea] [peregra] | [Limnea] [peregra] | [Lymnaea] [peregra] | Lacuna crassior | - [ovata] |
| RT3622 | *Crisilla semistriata* | [Alvania] - | - - | [Alvania] - | Hydrobia ulvae | [Alvania] - |
| RT3623 | *Potamopyrgus antipodarum* | - [jenkinsi] | [Pomatopyrgus] - | - - | Hydrobia ventrosa | - - |
| RT3624 | *Potamopyrgus antipodarum* | - [jenkinsi] | [Pomatopyrgus] - | - - | Hydrobia ventrosa | - - |
| RT3625 | *Mercuria confusa* | [Pseudamnicola] - | - - | - [cf. similis] | - - | - - |

**Figure 1. The number of differences from the AQC identification of specimens distributed in RT36 for each of the participating laboratories. Arranged in order of increasing number of differences.**



**Specimen Images and Detailed Breakdown of Identifications**

LabCodes are abbreviated in this report to exclude the Scheme year, *i.e.* LB1501a = Lab 01a. An additional terminal character has been added within each LabCode (small case sequential letters) to permit multiple data entries from each laboratory, *i.e.* two participants from laboratory 01 would be coded as LB 01a & LB 01b. For details of your LabCode please contact your Scheme representative or Unicomarine Ltd.

(Figure codes: Ape=apertural view; Api=apical view; Aba=abapical view; lat=lateral view; (xx)=specimen length mm)

**RT3601 – *Skeneopsis planorbis* (Figures 1a & b)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good/Fair, Medium.

Fig. 1a. *Skeneopsis planorbis* (RT3601) – Api (1.0)

One generic and one specific difference: Lab 15 identified as *Margarites helicinus* (Figure 1c) (which is usually white and has a smaller umbilicus and less deep sutures).

Lab 35 incorrectly spelt the species.

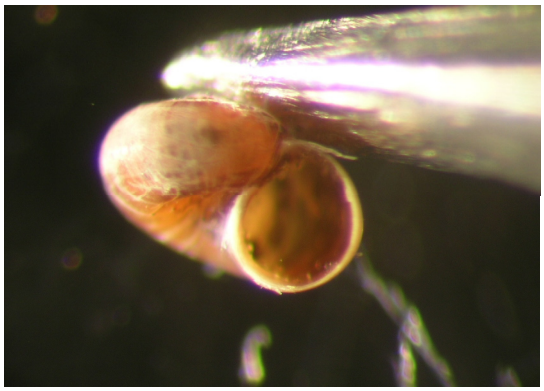
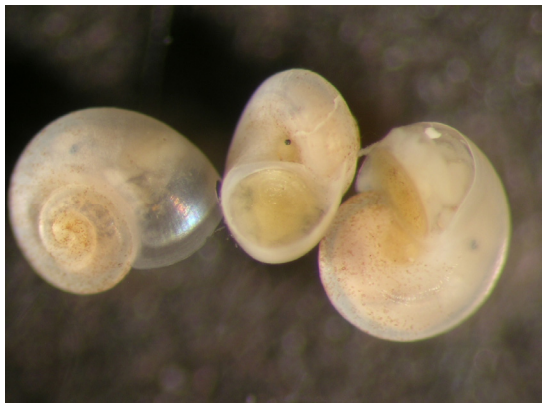


Fig. 1b. *Skeneopsis planorbis* (RT3601) – Ape (1.0)



1c. *Margarites helicinus* (TWcolnLMRapTr) – Ape/Api/Aba (1.0)

**RT3602 – *Chrysallida sarsi* (Figure 2a)**

Substratum: Mud / Sand. Salinity: Full. Depth: Circalittoral. Geography: S. North Sea. Condition: Good, Small.

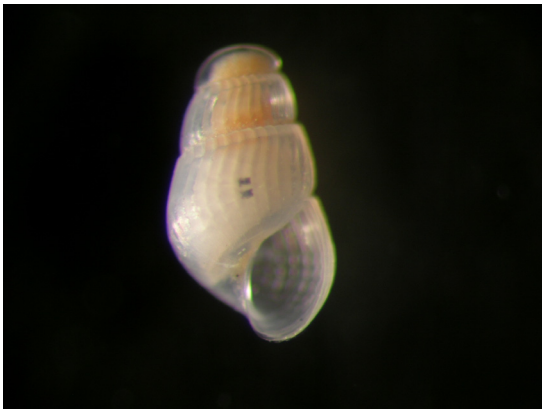


Fig. 2a. *Chrysallida sarsi* (RT3602) – Ape (1.3)

One generic and twenty-eight specific differences: Labs 01, 04, 05b, 09, 14a, 14b, 14c, 16, 21a and 21b identified as *C. decussata* (Figure 2c) (which has less sinuous ribs and lacks an umbilical chink); Labs 03, 07, 10, 20, 22, 23, 24, 25a, 25b and 35 identified as *Chrysallida interstincta* or the synonym *C. obtusa* (Figure 2b); Labs 05a, 13 and 15 identified as *C. indistincta* (Figure 2e) (both of which have fewer spiral ridges); Labs 06, 11, 36 and 37 identified *C. spiralis* or *Partulida spiralis*, which are synonyms of *Chrysallida pellucida* (Figure 2d) (in which the spiral sculpture does not cross the ribs); Lab 12 identified as *Rissoella diaphana* (Figure 2f) (which lacks sculpture).

Additional Literature:

Linden, van der & Eikenboom, 1992.

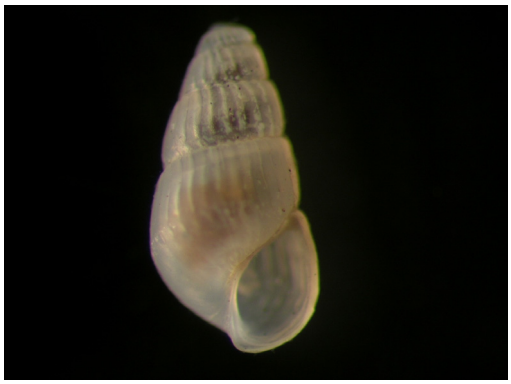


Fig. 2b. *Chrysallida interstincta* (41241) – Ape (1.8)

Fig. 2c. *Chrysallida decussata* (11064) – Ape (1.3)

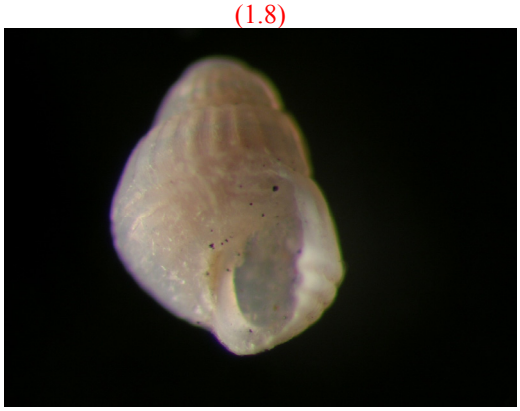


Fig. 2d. *Chrysallida pellucida* (2913) – Ape (1.0)

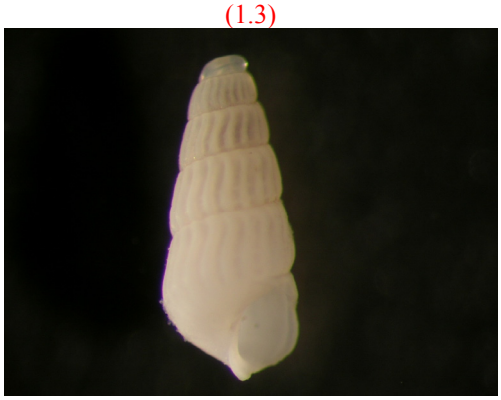


Fig. 2e. *Chrysallida indistincta* (36674) – Ape (1.9)

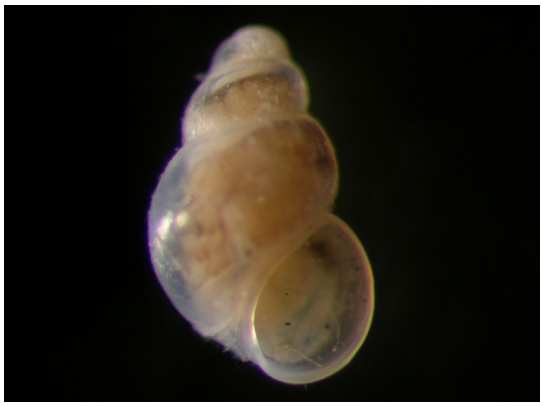


Fig. 2f. *Rissoella diaphana* (10633) – Ape (1.3)

**RT3603 – *Acanthodoris pilosa* (Figure 3a)**

Substratum: Gravel. Salinity: Full. Depth: Circalittoral. Geography: East Anglia. Condition: Good, Large.

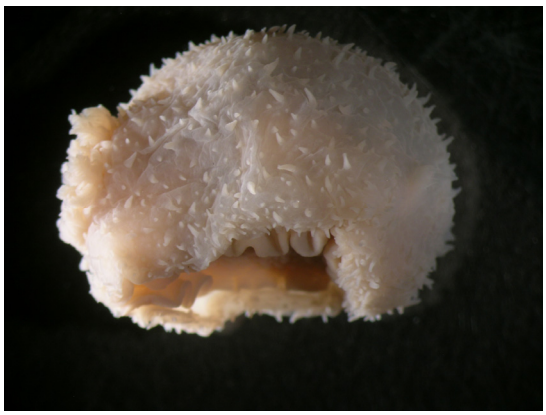


Fig. 3a. *Acanthodoris pilosa* (RT3603) Lat (12.0)

No taxonomic differences recorded.

Lab 07 incorrectly spelt the genus.

**RT3604 – *Crepidula fornicata* (Figure 4a)**

Substratum: Gravel. Salinity: Full. Depth: Infralittoral. Geography: S. England. Condition: Fair, Small (juvenile).

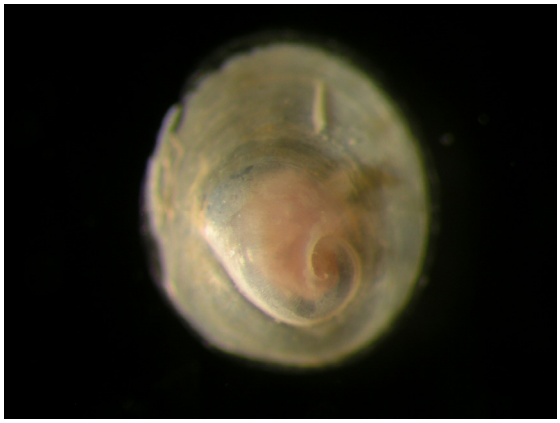


Fig. 4a. *Crepidula fornicata* (RT3604) Api (1.7)

Ten generic and ten specific differences: Labs 04, 11 and 36 identified as *Calyptraea chinensis* (Figure 4b) (which has a more central apex); Labs 21a and 21b identified as *Tectura virginea* (Figure 4d) (which has a non-spiral apex); Labs 06, 07 and 24 identified as *Velutina velutina* (Figure 4c); Lab 20 identified as *Capulus ungaricus* (Figure 4e) (both of which have spiral sculpture); Lab 37 identified as the internal shell of *Aplysia punctata* (Figure 4f shows a whole animal) (which has an internal shell, much smaller than the animal – animal was included with specimen).

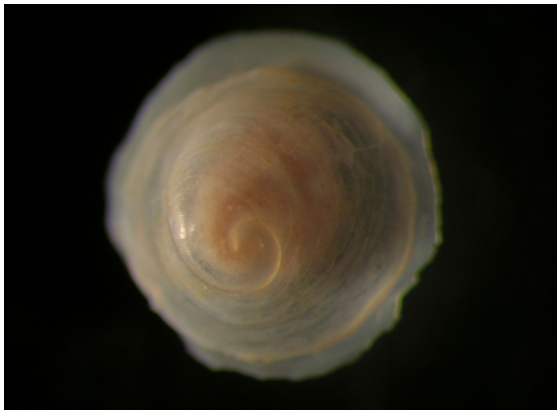


Fig. 4b. *Calyptraea chinensis* (42062) Api (1.7)

Fig. 4c. *Velutina velutina* (11064) – Api (2.1)

Fig. 4d. *Tectura virginea* (11064) Api (1.8)

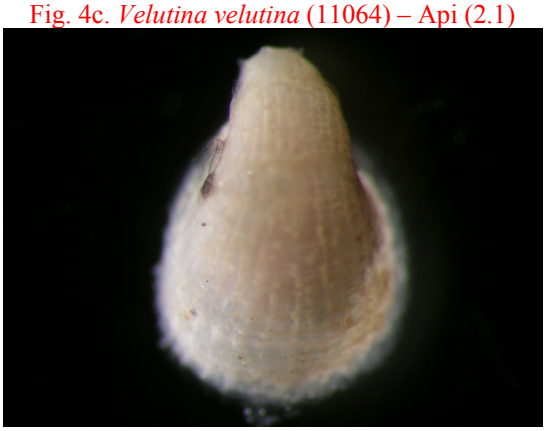


Fig. 4e. *Capulus ungaricus* (11066) Api (2.3)

Fig. 4f. *Aplysia punctata* (34754) – Lat (13)

**RT3605 – *Potamopyrgus antipodarum* (Figure 5a)**

Substratum: Mud. Salinity: Low. Depth: Infralittoral. Geography: SE. England. Condition: Good, Small.

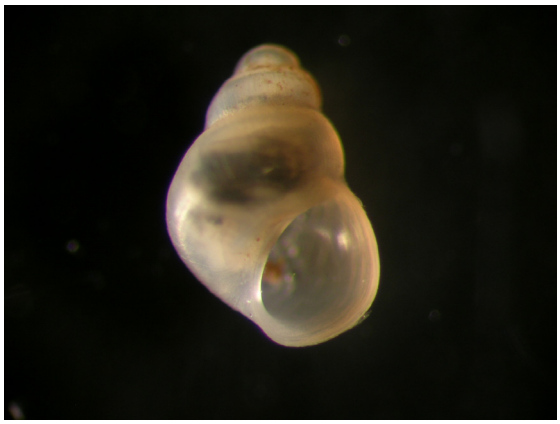


Fig. 5a. *Potamopyrgus antipodarum* (RT3605) – Ape (1.3)

Twenty-two generic and twenty-two specific differences: Labs 04, 08, 13, 19 and 35 identified as *Ventrosia ventrosa* (Figure 7a); Lab 11 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*) (both of which are smaller for the same number of whorls); Labs 06, 14a, 14b, 14c and 16 identified as *Assiminea grayana* (Figure 5b); Labs 05b, 09 and 20 identified as *Mercuria confusa* or the synonym *Pseudamnicola confusa* (Figure 25a); Lab 24 identified as *Marstoniopsis scholtzi,* a synonym of *M. insubrica* (no material available) (all of which are broader across the base relative to their height); Labs 07, 10 and 12 identified as *Hydrobia ulvae* (Figures 13a & 19a) (which has less tumid whorls and less distinct sutures); Lab 22 identified as *Rissoella diaphana* (Figure 2f); Lab 23 identified as *Rissoella globularis* (Figure 5d); Lab 25a identified as *Rissoella opalina* (Figure 5e) (all of which have a ridge across the operculum and are restricted to full salinity); Lab 03 identified as *Brachystomia* spp. (Figure 7b shows *B. scalaris*) (which has a tooth on the columella); 'spp.' implies that the RT vial contained more than one species, only one specimen should have been present).

Lab 25b incorrectly spelt the genus.

Lab 36 recorded the synonym *Potamopyrgus jenkinsi*.

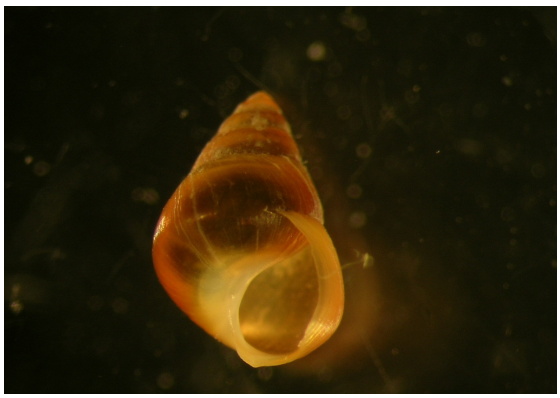


Fig. 5b. *Assiminea grayana* (36206) – Ape (1.4)

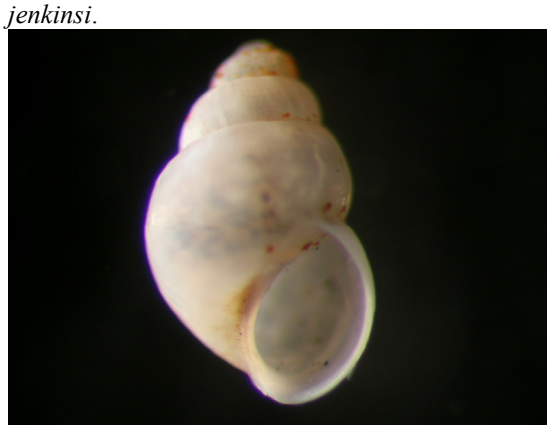


Fig. 5c. *Hydrobia neglecta*? (21805) – Ape (1.6)

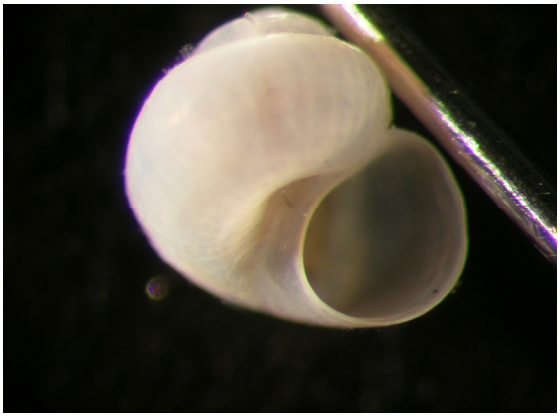


Fig. 5d. *Rissoella globularis* (11056) – Ape (1.1)

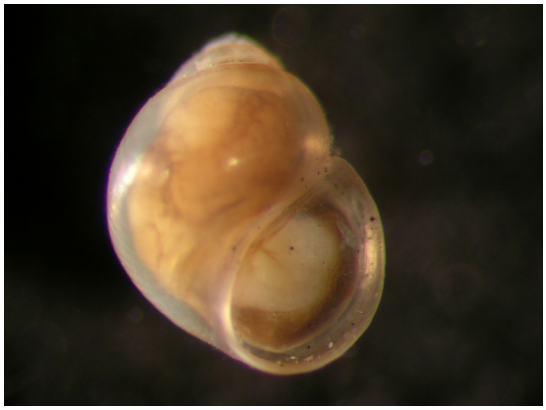


Fig. 5e. *Rissoella opalina* (10633) – Ape (1.4)

**RT3606 – *Hyala vitrea* (Figure 6a)**

Substratum: Sand. Salinity: Full. Depth: Circalittoral. Geography: NW. England. Condition: Good/Fair, Small. Note: Specimens part of growth series including RT3608 specimens.

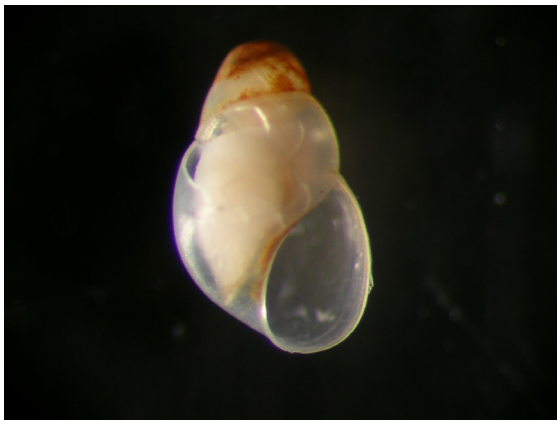


Fig. 6a. *Hyala vitrea* (RT3606) – Ape (1.5)

Twenty-three generic and twenty-three specific differences: Labs 06, 09, 11, 12, 13, 15, 16, 25a and 25b identified as *Risoella diaphana* (Figure 2f); Labs 14b, 21a, 21b, 22, 23, 35 and 36 identified as *Rissoella opalina* (Figure 5e) (both of which have ridges across the operculum and deeper sutures); Lab 24 identified as *Obtusella intersecta* (Figure 6c) (which has deeper sutures); Labs 03, 10, 14a and 14c identified as *Ondina diaphana* (Figure 6b); Lab 01 identified as *Odostomia eulimoides*, a synonym of *Brachystomia eulimoides* (Figure 6d) (both of which have intucked protoconchs and a tooth on the columella); Lab 20 did not submit data for this taxon (ring test specimens should be identified at species level with appropriate confidence level notes).

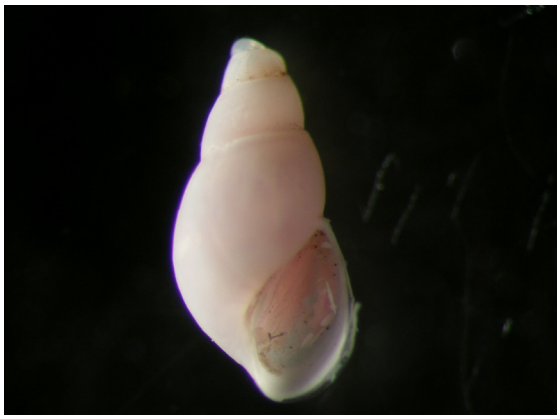


Fig. 6b. *Ondina diaphana* (31599) – Ape (2.0)

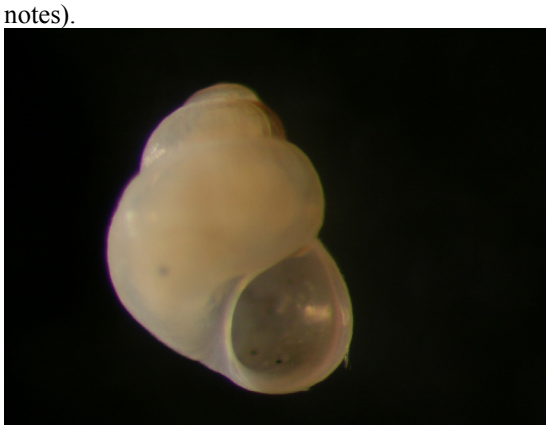


Fig. 6c. *Obtusella intersecta* (17647) – Ape (1.1)

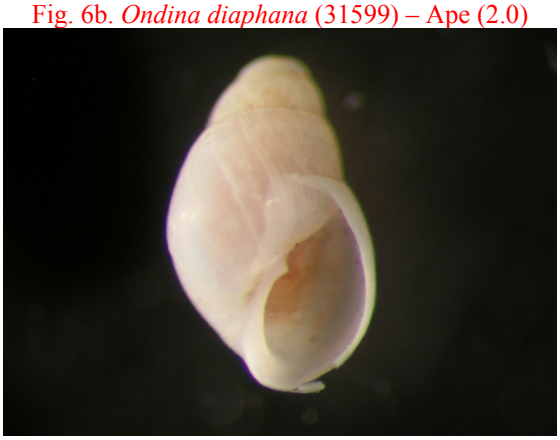


Fig. 6d. *Brachystomia eulimoides* (21219) – Ape (1.8)

**RT3607 – *Ventrosia ventrosa* (Figure 7a)**

Substratum: Vegetation. Salinity: Low. Depth: Infralittoral. Geography: S. E. England. Condition: Good, Medium.

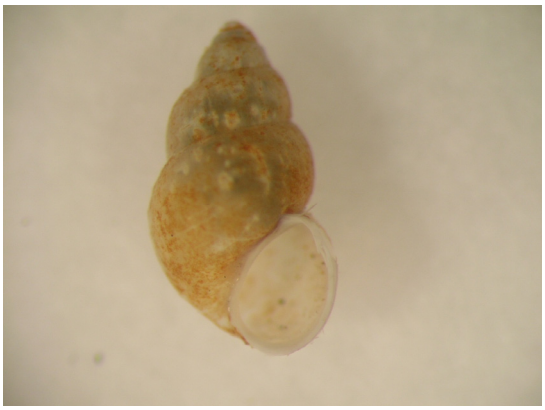


Fig. 7a. *Ventrosia ventrosa* (RT3607) – Ape (2.9)

Twenty generic and twenty specific differences: Labs 03, 04, 06, 10, 13, 14a, 14b, 14c, 19, 21a, 22, 25a and 25b identified as *Hydrobia ulvae* (Figures 13a & 19a); Labs 21b, 36 and 37 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*) (both of which have less distinct sutures); Lab 23 identified as *Hyala vitrea* (Figures 6a & 8a) (which has less distinct sutures and is restricted to full salinity); Labs 12 and 16 identified as *Pseudamnicola confusa*, a synonym of *Mercuria confusa* (Figure 25a) (which has a broader shell relative to its height); Lab 07 identified as *Brachystomia rissoides*, a synonym of *B. scalaris* (Figure 7b) (which has a tooth on the columella).

Labs 09, 15 and 24 recorded the synonym *Hydrobia ventrosa*.

Fig. 7b. *Brachystomia scalaris* (21219) – Ape (2.9)

**RT3608 – *Hyala vitrea* (Figure 8a)**

Substratum: Mud / Sand. Salinity: Full. Depth: Circalittoral. Geography: N. W. England. Condition: Good/Fair, Large. Note: Specimens part of growth series including RT3606 specimens.

Fig. 8a. *Hyala vitrea* (RT3608) – Ape (3.4)

Four generic and four specific differences: Labs 12 and 23 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*) (which has a dark body, showing through the shell, and is restricted to brackish water); Lab 09 identified as *Ondina diaphana* (Figure 6b) (which has an intucked protoconch); Lab 36 identified as *Rissoa membranacea* (Figure 8b) (which has a less cylindrical shell).

Labs 05a, 05b and 15 incorrectly spelt the genus.

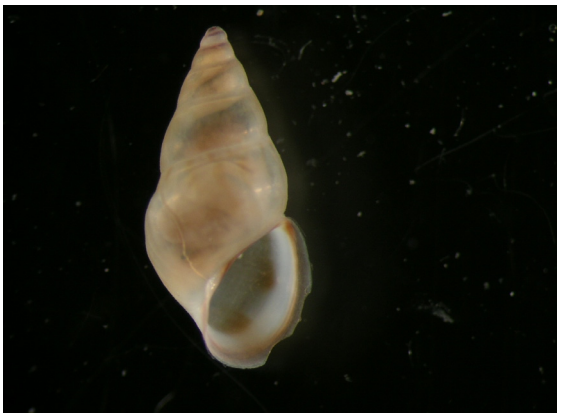


Fig. 8b. *Rissoa membranacea* (RT1607) – Ape (4.2)

**RT3609 – *Onoba aculeus* (Figure 9a)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Small. Note: Specimens part of growth series including RT3612 specimens.

Fig. 9a. *Onoba aculeus* (RT3609) – Ape (1.1)

Twenty-six generic and twenty-six specific differences: Labs 03, 04, 06, 07, 09, 11, 14b, 14c, 15, 16, 19, 21a, 21b, 24, 25a, 25b and 35 identified as *Obtusella intersecta* (Figure 6c); Labs 12, 20 and 23 identified as *Rissoella diaphana* (Figure 2f); Labs 10 and 13 identified as *Pusillina inconspicua* (Figure 9b); Lab 14a identified as *Pusillina sarsa (sic.)* (Figure 9c, *Pusillina sarsi*); Lab 36 identified as *Rissoella opalina* (Figure 5e) (all of which have indistinct or absent spiral sculpture); Lab 01 identified as *Ondina divisa* (Figure 9d) (which has an intucked protoconch); Lab 37 identified as *Chrysallida sarsi* (Figure 2a) (which has axial ribs).

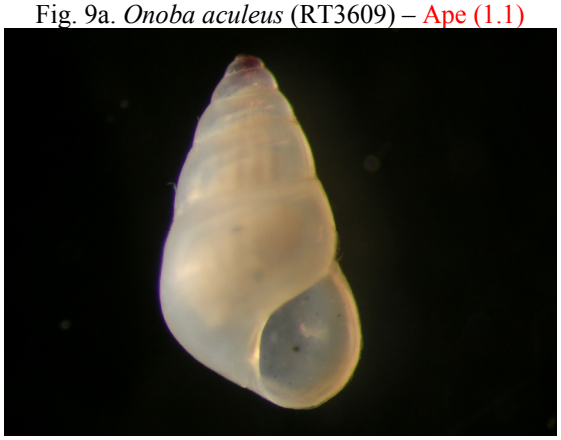


Fig. 9b. *Pusillina inconspicua* (5314) – Ape (1.4)

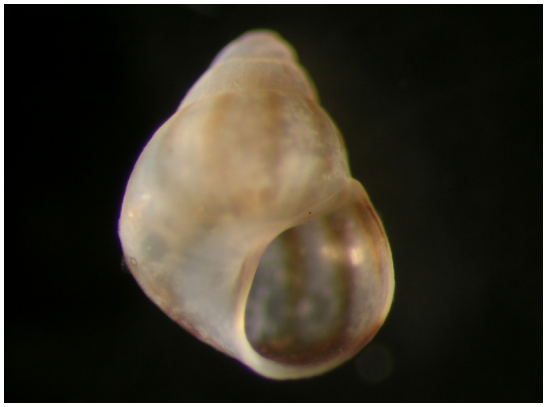


Fig. 9c. *Pusillina sarsi* (11039) – Ape (1.9)

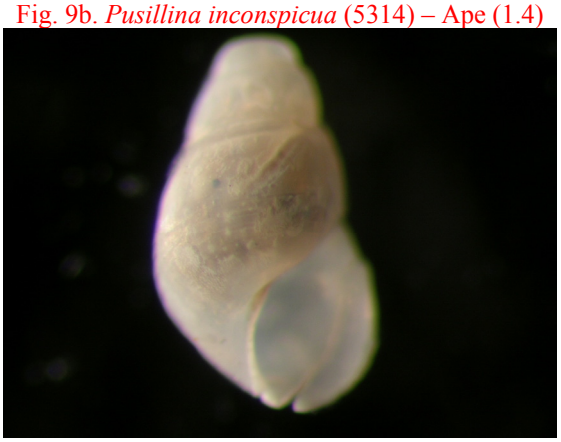


Fig. 9d. *Ondina divisa* (40854) – Ape (1.2)

**RT3610 – *Cylichnina umbilicata* (Figure 10a)**

Substratum: Mud. Salinity: Full. Depth: Circalittoral. Geography: N. North Sea. Condition: Good, Small/Medium.

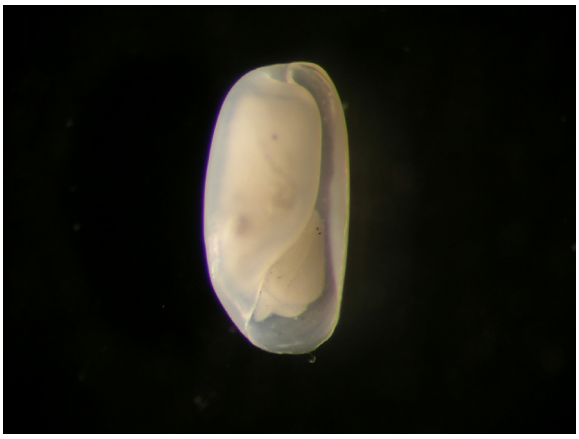


Fig. 10a. *Cylichnina umbilicata* (RT3610) – Ape (1.8)

Fourteen generic and fourteen specific differences: Labs 01, 11, 12, 15, 20, 24 and 36 identified as *Retusa truncatula* (Figure 10b); Lab 22 identified as *Retusa obtusa* (Figure 10e) (both of which have a truncate apex or visible whorls); Labs 05a, 05b, 14a and 14b identified as *Cylichna alba* (Figure 10c) (which has wider, less glossy shell and faint spiral sculpture); Labs 07 and 23 identified as *Cylichna cylindracea* (Figure 10d) (which has a more cylindrical shell with faint spiral sculpture and a coloured columella).

Labs 03, 04, 06, 08, 10, 13, 14c, 16, 19, 21a, 21b, 25a, 35 and 37 recorded the synonym *Retusa umbilicata*.

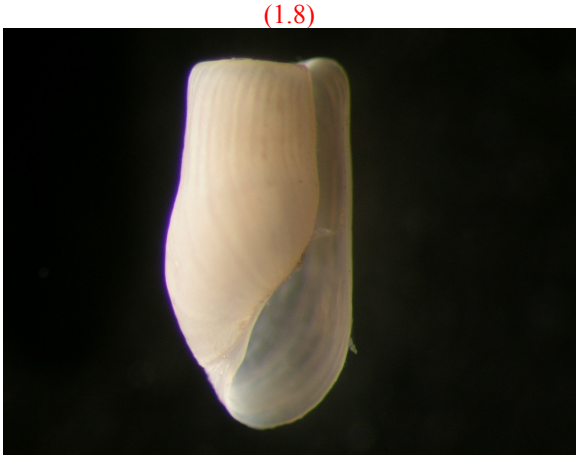


Fig. 10b. *Retusa truncatula* (42073) – Ape (1.9)

Fig. 10c. *Cylichna alba* (28955) – Ape (8.0)

Fig. 10d. *Cylichna cylindracea* (35483) – Ape (2.3)

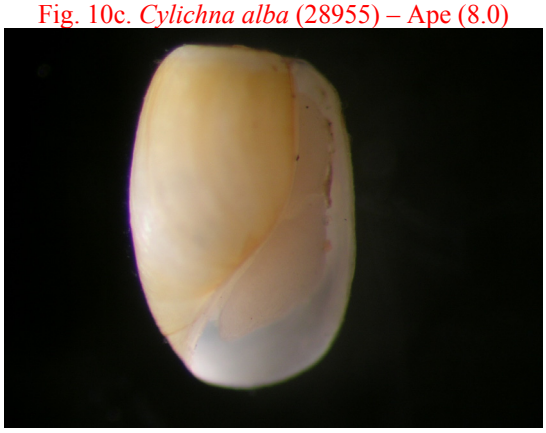


Fig. 10e. *Retusa obtusa* (42572) – Ape (1.8)

**RT3611 – *Chrysallida fenestrata* (Figure 11a)**

Substratum: Mud. Salinity: Full. Depth: Circalittoral. Geography: S. W. England. Condition: Fair/Good, Medium.

Fig. 11a. *Chrysallida fenestrata* (RT3611) – Ape (4.5)

Three generic and four specific differences: Lab 14a identified as *Graphis albida* (Figure 11b) (which has finer sculpture and a narrower shell); Lab 22 identified as *Chrysallida terebellum* (Figure 11d shows a possible *C. terebellum*) (which has a columellar tooth and weaker spiral ridges); Lab 36 identified as *Bittium reticulatum* (Figure 16a) (which is coloured and has more spiral ridges per whorl); Lab 37 identified as *Turbonilla lactea* (Figure 11c) (which lacks spiral sculpture and has an exposed protoconch lying across the shell axis).

Labs 03, 04, 05a, 05b, 06, 07, 08, 10, 11, 12, 13, 14b, 14c, 15, 16, 19, 21a, 21b, 24, 25a and 35 recorded the synonym *Tragula fenestrata*.

Additional Literature:
Linden, van der & Eikenboom, 1992.

Fig. 11b. *Graphis albida* (2626) – Ape (3.0)

Fig. 11c. *Turbonilla lactea* (22699) – Ape (5.5)

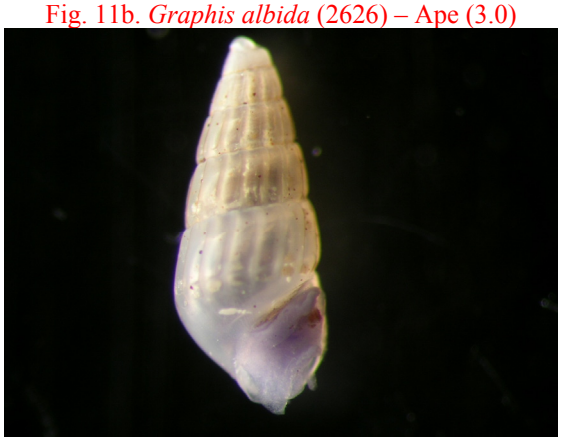


Fig. 11d. *Chrysallida terebellum*? (damaged) (32457) – Ape (2.3)

**RT3612 – *Onoba aculeus* (Figure 12a)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Large. Note: Specimens part of growth series including RT3609 specimens.

Fig. 12a. *Onoba aculeus* (RT3612) – Ape (2.4)

Two generic and four specific differences: Labs 10 and 14a identified as *Onoba semicostata* (Figure 12b) (which has a smaller protoconch); Lab 14b identified as *Ceratia proxima* (Figure 12c) (which has finer spiral sculpture and less deep sutures); Lab 36 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*) (which lacks spiral sculpture).

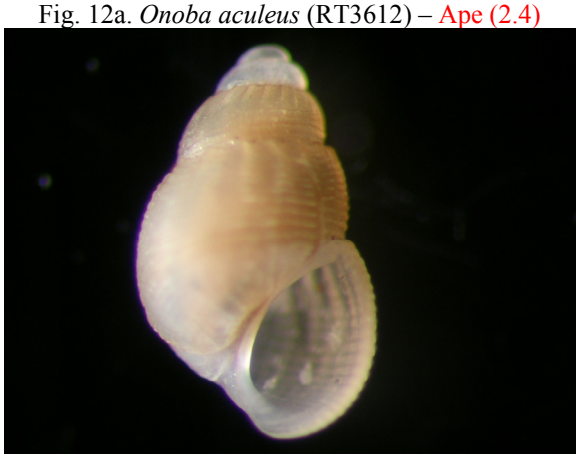


Fig. 12b. *Onoba semicostata* (39959) – Ape (1.8)

Fig. 12c. *Ceratia proxima* (12947) – Ape (2.6)

**RT3613 – *Hydrobia ulvae* (Figure 13a)**

Substratum: Mud. Salinity: Slightly Reduced. Depth: Intertidal. Geography: East Anglia. Condition: Good, Large. Note: Specimens part of growth series including RT3619 specimens.

Fig. 13a. *Hydrobia ulvae* (RT3613) – Ape (7.5)

Six generic and six specific differences: Labs 16, 21a and 21b identified as *Ventrosia ventrosa* (Figure 7a) (which has deeper sutures); Lab 24 identified as *Rissoa membranacea* (Figure 8b) (which has a wider aperture with a columellar swelling); Lab 22 identified as *Melanella alba* (Figure 13b) (which has a glossy white, more elongated shell); Lab 23 identified as *Barleeia unifasciata* (Figure 13c) (which has a red operculum and, together with *M. alba*, is restricted to full salinity).

Lab 03 incorrectly spelt the species.

Labs 35 and 37 recorded the synonym *Peringia ulvae*.

Fig. 13b. *Melanella alba* (10224) – Ape (5.0)

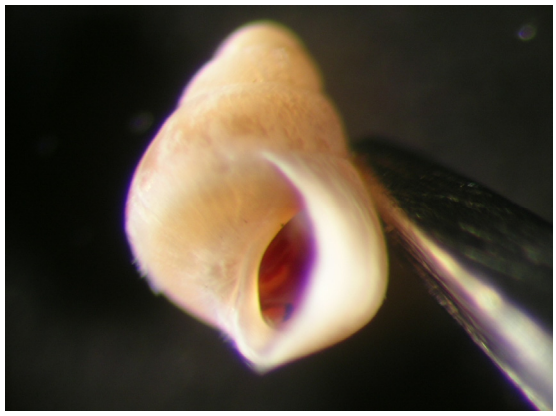


Fig. 13c. *Barleeia unifasciata* (10631) – Ape (1.5)

**RT3614 – *Vitreolina philippi* (Figure 14a)**

Substratum: Mud / Sand. Salinity: Full. Depth: Circalittoral. Geography: N. North Sea. Condition: Good, Small/Medium.

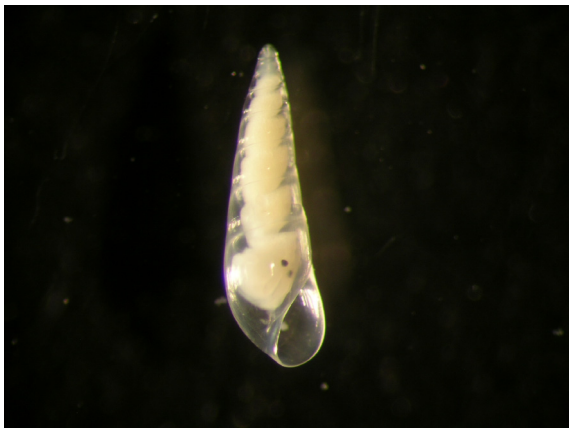


Fig. 14a. *Vitreolina philippi* (RT3614) – Ape (2.0)

Four generic and seven specific differences: Labs 05a, 05b and 06 identified as *Crinophtherios collinsi,* or the synonym *Vitreolina collinsi** (no material available) (which has a broader shell); Lab 01 identified as *Melanella alba* (Figure 13b); Lab 12 identified as *Melanella frielei* (Figure 14b shows a possible *Melanella frielei*); Lab 22 identified as *Polygireulima polita* (Figure 14c shows a possible *Polygireulima polita*) (all of which have straighter shells, broader apical whorls and less distinct peripheral bulges to the outer lip); Lab 37 identified as *Eulima bilineata* (Figure 14d) (which has spiral colour bands).

Labs 03, 07, 08, 13, 25a, 35 and 36 incorrectly spelt the species.

Additional Literature:
Bouchet & Waren, 1986.

*Due to current taxonomic uncertainty both *Crinophtherios* and *Vitreolina* are accepted as correct genera for this RT.

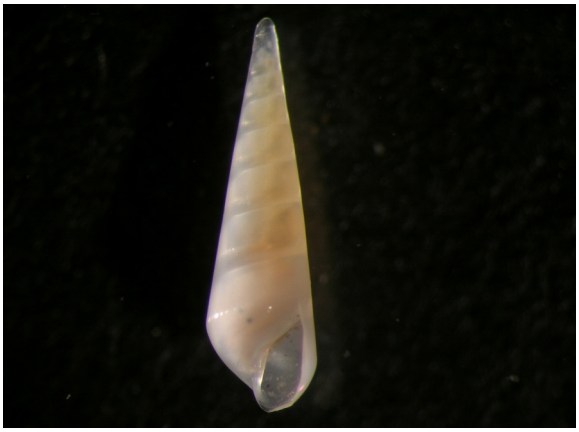


Fig. 14b. *Melanella frielei*? (18179) – Ape (4.5)

Fig. 14c. *Polygireulima polita*? (31603) – Ape (3.8)

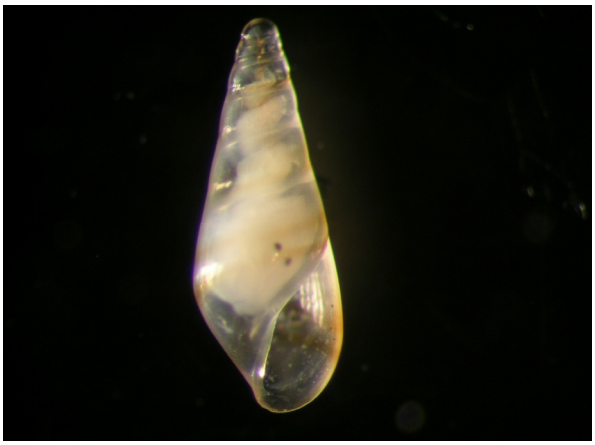


Fig. 14d. *Eulima bilineata* (42634) – Ape (1.9)

**RT3615 – *Gibbula cineraria* (Figure 15a)**

Substratum: Gravel. Salinity: Full. Depth: Circalittoral. Geography: East Anglia. Condition: Fair/Good, Variable Small/Medium.

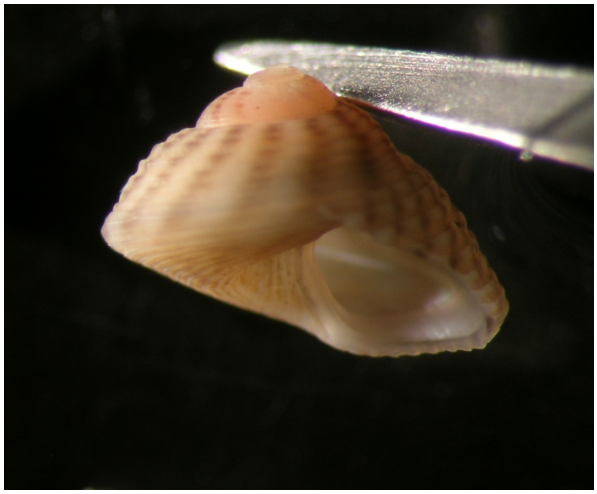


Fig. 15a. *Gibbula cineraria* (RT3615) – Ape (3.6)

One generic and sixteen specific differences: Labs 04, 06, 08, 11, 13, 14b, 16, 20, 21b, 22 and 24 identified as *Gibbula tumida* (Figure 15c) (which has a more distinct subsutural shelf and less distinct axial colour bands); Labs 21a, 35, 36 and 37 identified as *Gibbula umbilicalis* (Figure 15d) (in which the axial colour bands and spiral ridges are fewer and more distinct); Lab 03 identified as *Calliostoma* Spp. (Figure 15e shows *Calliostoma ziziphynum*) (which lack an umbilicus at all ages and have more conical shells); 'Spp.' implies that the RT vial contained more than one species, only one specimen should have been present).

Lab 07 incorrectly spelt the species.

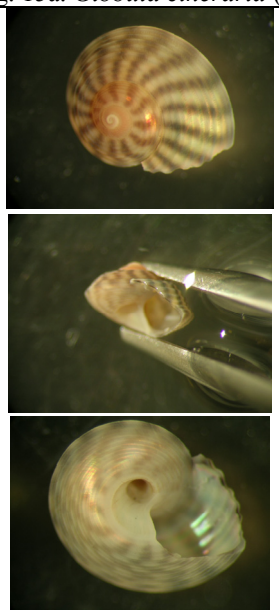


Fig. 15b. *Gibbula cineraria* (RT2619) – multi(5.0)

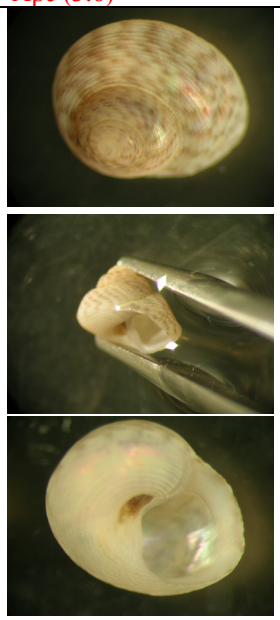


Fig. 15c. *Gibbula tumida* (13468) – multi(5.0)

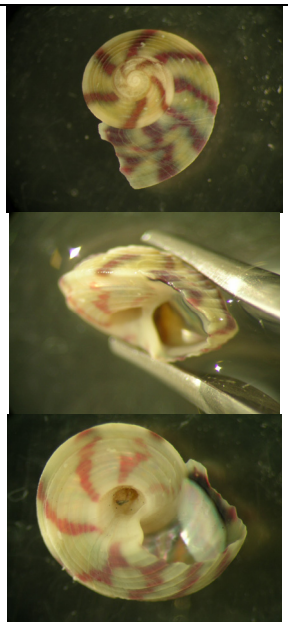


Fig. 15d. *Gibbula umbilicalis* (10631) – multi(8.0)

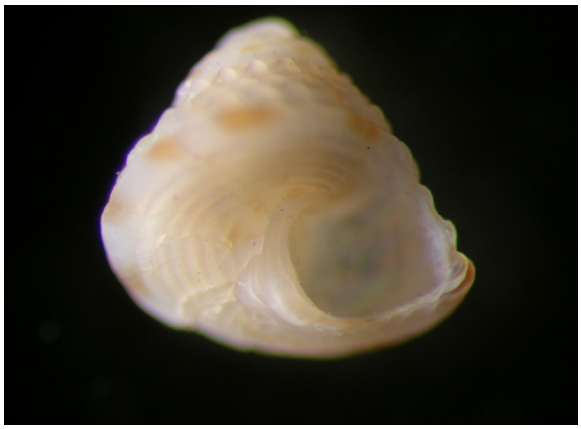


Fig. 15d. *Calliostoma ziziphynum* (9204/00009) – Ape (1.9)

**RT3616 – *Bittium reticulatum* (Figure 16a)**

Substratum: Zostera. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Medium.

Fig. 16a. *Bittium reticulatum* (RT3616) – Ape (5.2)

Fig. 16b. *Cerithiopsis tubercularis* (33570) – Ape (4.3) - left; *Cerithiella metula*? (28953) – Ape (4.5) - right.

One generic and one specific difference: Lab 15 identified as *Cerithiopsis metaxa,* a synonym of *Metaxia metaxae* (Figure 16b shows two similar species *Cerithiopsis tubercularis* and a possible *Cerithiella metula*) (which have distinct siphonal canals).

Lab 37 incorrectly spelt the species.

**RT3617 – *Lacuna vincta* (Figure 17a)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Medium.

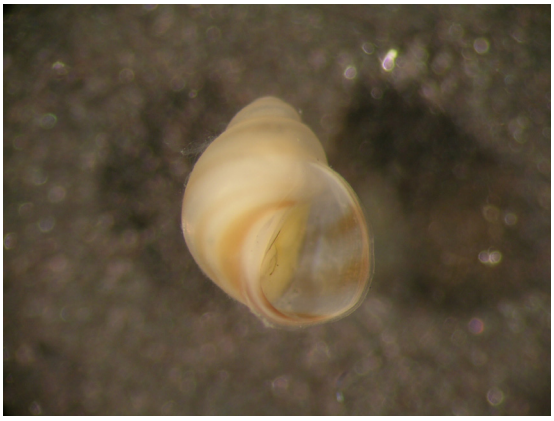


Fig. 17a. *Lacuna vincta* (RT3617) – Ape (2.3)

Seven generic and thirteen specific differences: Labs 09, 22, 23, 24, 25a and 25b identified as *Lacuna parva* (Figure 17b) (which has a more flattened spire); Labs 04, 06, 07 and 08 identified as *Eatonina fulgida*, or the synonym *Cingulopsis fulgida* (Figure 17c); Lab 01 identified as *Littorina neglecta* (Figure 17d) (both of which have deeper sutures); Lab 03 identified as *Rissoella opalina* (Figure 5e) (which lacks colour pattern and has a ridge across the operculum); Lab 37 did not submit data for this taxon (ring test specimens should be identified at species level with appropriate confidence level notes).

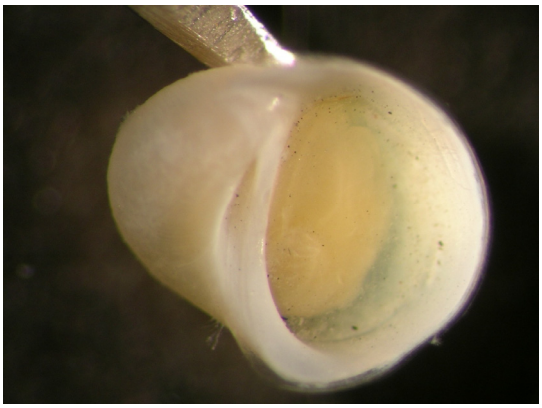


Fig. 17b. *Lacuna parva* (RT2614) – Ape (2.4)

Fig. 17c. *Eatonina fulgida* (10633) – Ape (1.0)

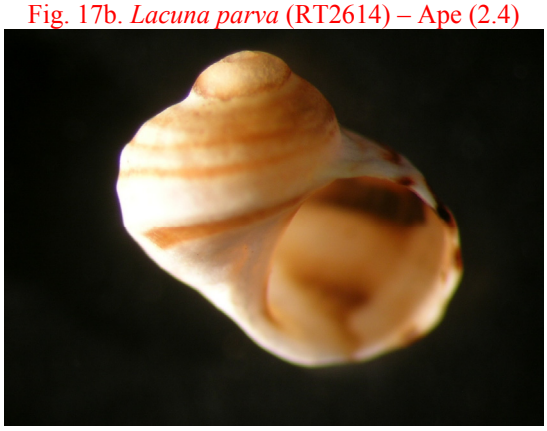


Fig. 17d. *Littorina neglecta* (TWcolnPorthcurno79) – Ape (3.0)

**RT3618 – *Omalogyra atomus* (Figure 18a)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Small.

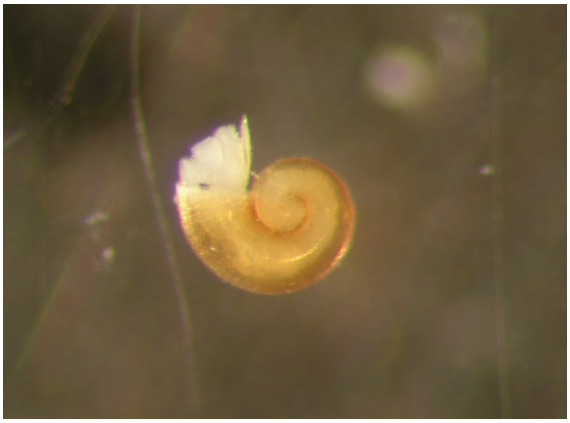


Fig. 18a. *Omalogyra atomus* (RT3618) – Api (0.5)

One generic and one specific difference: Lab 10 identified as *Ammonicerina rota*, a synonym of *Ammonicera rota.* (Figure 18b & c) (which is smaller for the same number of whorls).

Lab 04 incorrectly spelt the genus; Lab 06 incorrectly spelt the species.

Fig. 18b. *Ammonicera rota* (TWcolnCarsaig) – Api (0.4)

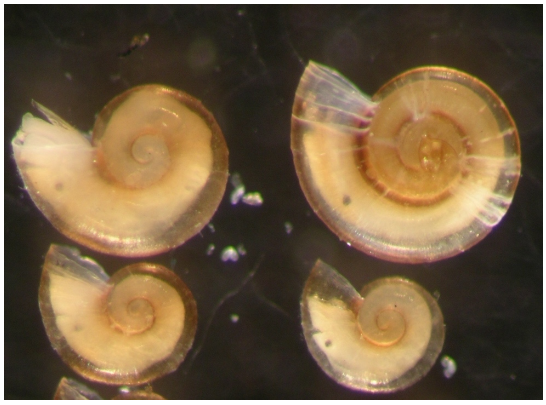


Fig. 18c. *Ammonicera rota* (TWcolnCarsaig) – Api (0.4, smallest) – right vertical row; *Omalogyra atomus* (TWcolnCarsaig ; source for RT3618) – Api (0.5, smallest) – left row

**RT3619 – *Hydrobia ulvae* (Figure 19a)**

Substratum: Mud. Salinity: Slightly Reduced. Depth: Intertidal. Geography: East Anglia. Condition: Fair/Poor, Small. Note: Specimens part of growth series including RT3613 specimens.

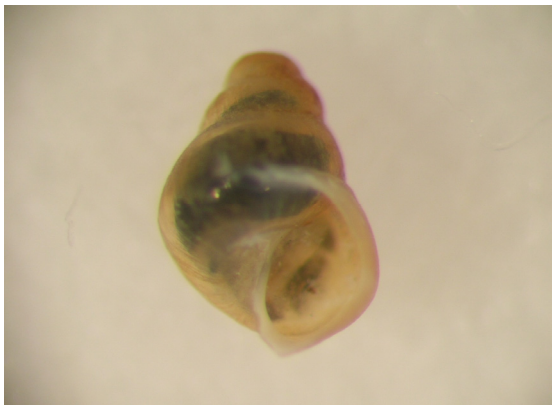


Fig. 19a. *Hydrobia ulvae* (RT3619) – Ape (1.0)

Twelve generic and twelve specific differences: Lab 15 identified as *Potamopyrgus antipodarum* (Figures 5a, 23a & 24a) (which has deeper sutures); Labs 14a, 14b, 14c and 20 identified as *Assiminea grayana* (Figure 5b) (which has a broader shell, with reddish colour); Labs 23, 24, 25a and 36 identified as *Rissoella opalina* (Figure 5e) (which has a ridge across the operculum); Lab 06 identified as *Paludinella litorina* (no material available but see www.marlin.ac.uk/php/image_viewer.php?images=pallit&topic=Species) (which has a broader shell); Lab 01 identified as *Lacuna parva* (Figure 17b) (which has a flatter spire); Lab 11 identified as *Odostomia acuta* var. umbilicaris, a form of *O. acuta* (Figure 19b) (which has a tooth on the columella).

Lab 03 incorrectly spelt the species.

Labs 35 and 37 recorded the synonym *Peringia ulvae*.

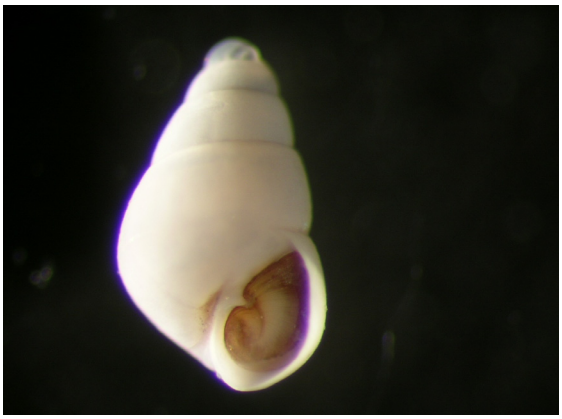


Fig. 19b. *Odostomia acuta* (33994) – Ape (1.6)

**RT3620 – *Rissoa parva* var. interrupta (Figure 20a)**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: N. Wales. Condition: Fair/Poor, Medium.

Fig. 20a. *Rissoa parva* var. interrupta (RT3620) – Ape (2.6)

Seven generic and eight specific differences: Labs 03 and 21b identified as *Pusillina inconspicua* (Figure 9b) (which has an internal purple patch in the apex); Lab 06 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*); Labs 07 and 37 identified as *Hydrobia ulvae,* or the synonym *Peringia ulvae* (Figures 13a & 19a) (both of which lack colour pattern); Lab 01 identified as *Cingula trifasciata* (Figure 20b) (which has shallower sutures and more distinct spiral sculpture); Lab 12 identified as *Barleeia unfasciata (sic.)* (Figure 13c) (which has a red operculum); Lab 15 identified as *Rissostomia membranacea,* a synonym of *Rissoa membrancea* (Figure 8b) (which has a wider aperture with a columellar swelling).

Labs 05a, 05b and 35 recorded *Rissoa parva*; Labs 04, 08, 10, 11, 14a, 14b, 14c, 16, 19, 21a and 22 recorded *Rissoa interrupta*; these are both treated as correct for this RT, for compatibility with ERMS.

Fig. 20b. *Cingula trifasciata* (10631) – Ape (2.6)

**RT36021 – *Radix balthica* (Figure 21a)**

Substratum: Vegetation. Salinity: Low. Depth: Infralittoral. Geography: S. E. England. Condition: Fair/Good, Medium.

Fig. 21a. *Radix balthica* (RT3621) – Ape (5.2)

Four generic and four specific differences: Lab 01 identified as *Succinea putris* (Figure 21c) (which lacks a columellar twist); Lab 01 identified as *Cryptonatica affinis* (Figure 21b shows a similar species *Polinices fuscus*); Lab 23 identified as *Amauropsis islandica (sic.)* (no material available); Lab 36 identified as *Lacuna crassior* (Figure 21d) (all of which have opercula and are restricted to higher salinity).

Labs 03, 04, 05a, 05b, 06, 07, 09, 10, 11, 12, 13, 15, 16, 19, 22, 24, 25a, 25b and 35 recorded the synonym *Lymnaea peregra*; Lab 37 recorded the synonym *Radix ovata*.

Additional Literature:
Anderson, 2005.

Fig. 21b. *Polinices fuscus* (42618) – Ape (4.0)

Fig. 21c. *Succinea putris* (TLF Ham.14/07/06) – Ape (13)

Fig. 21d. *Lacuna crassior* (11961) – Ape (5.2)

**RT3622 – *Crisilla semistriata* (Figure 22a)**

Substratum: Mud. Salinity: Full. Depth: Circalittoral. Geography: Northern Ireland. Condition: Good, Medium.

Fig. 22a. *Crisilla semistriata* (RT3622) – Ape (2.7)

Eleven generic and eleven specific differences: Lab 24 identified as *Cingula trifasciata* (Figure 20b) (which has a relatively taller shell); Lab 03 identified as *Onoba semicostata* (Figure 12b) (which has stronger spiral sculpture); Lab 06 identified as *Pusillina inconspicua* (Figure 9b); Lab 07 identified as *Rissoa parva* (Figure 20a shows *R..parva* var. interrupta); Lab 11 identified as *Rissoa porifera* (No material available) (all of which have less regular spiral sculpture); Labs 04, 13, 20, 22 and 36 identified as *Hydrobia ulvae* (Figures 13a & 19a) (which lacks spiral sculpture); Lab 12 identified as *Liostomia clavula* (Figure 22b) (which has an intucked protoconch).

Labs 10, 14a, 14b, 14c, 15, 16, 19, 25a, 35 and 37 recorded the synonym *Alvania semistriata*.

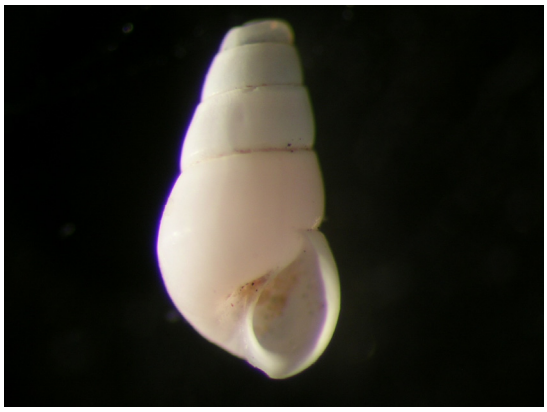


Fig. 22b. *Liostomia clavula* (31603) – Ape (1.9)

**RT3623 – *Potamopyrgus antipodarum* (Figure 23a)**

Substratum: Gravel. Salinity: Low. Depth: Infralittoral. Geography: S. E. England. Condition: Good, Large. Note: Spiral periostracal keel present.

Fig. 23a. *Potamopyrgus antipodarum* (RT3623) – Ape (4.1)

One generic and one specific difference: Lab 36 identified as *Hydrobia ventrosa*, a synonym of *Ventrosia ventrosa* (Figure 7a) (which lacks a periostracal keel).

Labs 07 and 25b incorrectly spelt the genus.

Labs 06, 07 and 25a recorded the synonym *Potamopyrgus jenkinsi*.

**RT3624 – *Potamopyrgus antipodarum* (Figure 24a)**

Substratum: Gravel. Salinity: Low. Depth: Infralittoral. Geography: S. E. England. Condition: Good, Large. Note: Spiral periostracal keel not present.

Fig. 24a. *Potamopyrgus antipodarum* (RT3624) – Ape (4.2)

Seven generic and seven specific differences; Labs 03, 07 and 12 identified as *Hydrobia neglecta* (Figure 5c shows a possible *Hydrobia neglecta*); Labs 22 and 36 identified as *Ventrosia ventrosa,* or the synonym *Hydrobia ventrosa* (Figure 7a) (both of which are smaller for the same number of whorls); Labs 10 and 24 identified as *Hydrobia ulvae* (Figures 13a & 19a) (which has less deep sutures).

Labs 25b incorrectly spelt the genus.

Labs 06 and 25a recorded the synonym *Potamopyrgus jenkinsi*.

**RT3625 – *Mercuria confusa* (Figure 25a)**

Substratum: Vegetation. Salinity: Low. Depth: Intertidal. Geography: S. England. Condition: Good, Medium.

Fig. 25a. *Mercuria confusa* (RT3625) – Ape (3.3)

Five generic and five specific differences; Labs 03, 06 and 07 identified as *Ventrosia ventrosa,* or the synonym *Hydrobia ventrosa* (Figure 7a) (which has a relatively taller shell); Lab 13 identified as *Bithynia leachi*, a synonym of *Bithynia leachii* (Figure 25b) (which has deeper sutures and concentric operculum sculpture); Lab 09 identified as *Rissoella opalina* (Figure 5e) (which has less distinct growth lines and is restricted to higher salinity).

Labs 08, 11, 12, 14a, 14b, 14c, 16, 19, 20, 21a, 22, 24 and 25a recorded the synonym *Pseudamnicola confusa*. Labs 15 and 35 recorded *Mercuria* cf. *similis,* these records are treated as correct for this RT.

Fig. 25b. *Bithynia leachii* (26073) – Ape (3.7)

**Acknowledgements**

We would like to thank Martin Willing (of Midhurst, West Sussex) for donating specimens for this ring test circulation.

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## Ring Test Return Instructions

**Please return all ring test specimens by 22nd May 2009.** These are reference collection specimens and must be returned to our museum. Your laboratory will be ineligible for future ring tests if specimens are not returned.

Return address: **David Hall, Unicomarine Ltd., Head Office, 7 Diamond Centre, Works Road, Letchworth, Hertfordshire SG6 1LW, UK**