*CONSORZIO DELL' OGLIO*
*- BRESCIA –*

# Progetto di sperimentazione dei rilasci per il deflusso minimo vitale nel fiume Oglio sub lacuale

## ALLEGATI

## alla Relazione annuale 2011 – 2012

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# ALLEGATO I

## AZIONE 2 : MONITORAGGIO CHIMICO – FISICO

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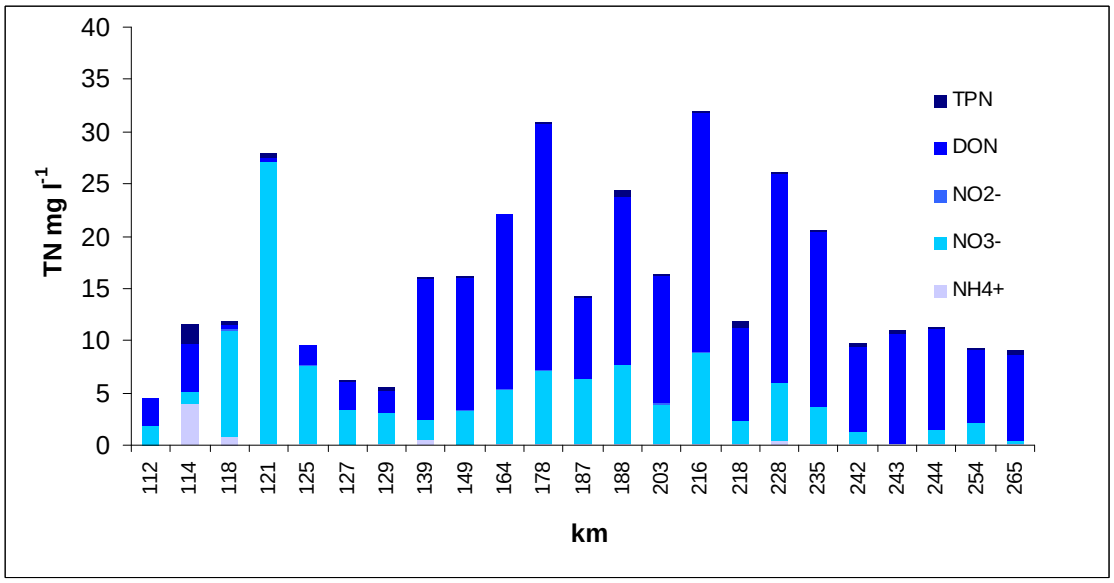
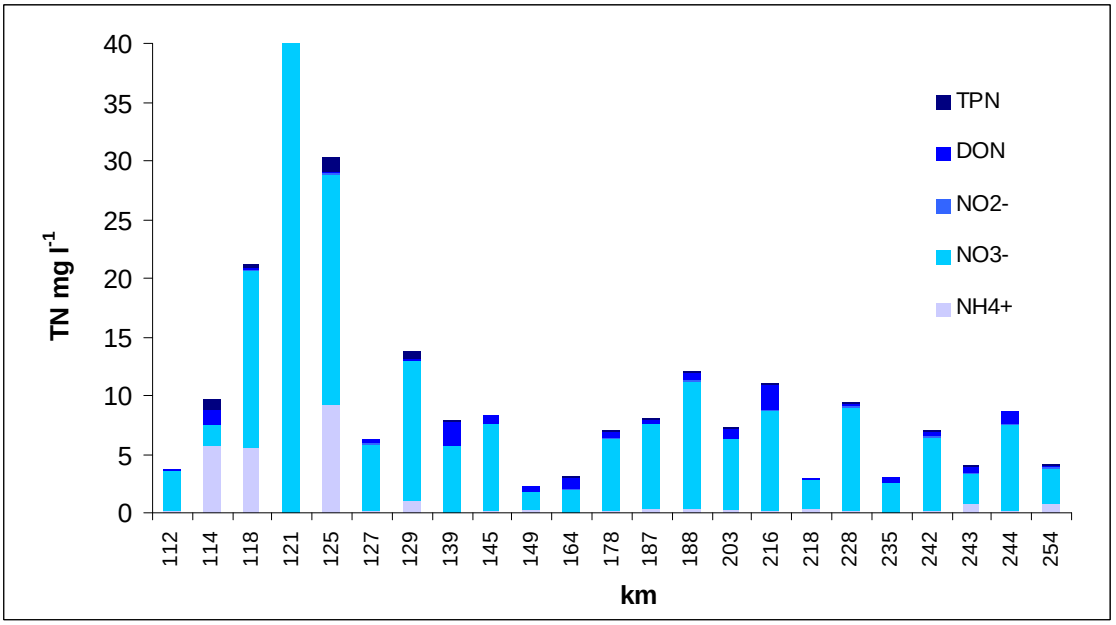
# ALLEGATO I
# AZIONE 2: MONITORAGGIO CHIMICO-FISICO

## SCENARI DI SPERIMENTAZIONE: GRUPPO A - IMMISSARI

Campagna n° 9/2011 (Estate)




Campagna n° 10/2011 (Autunno)



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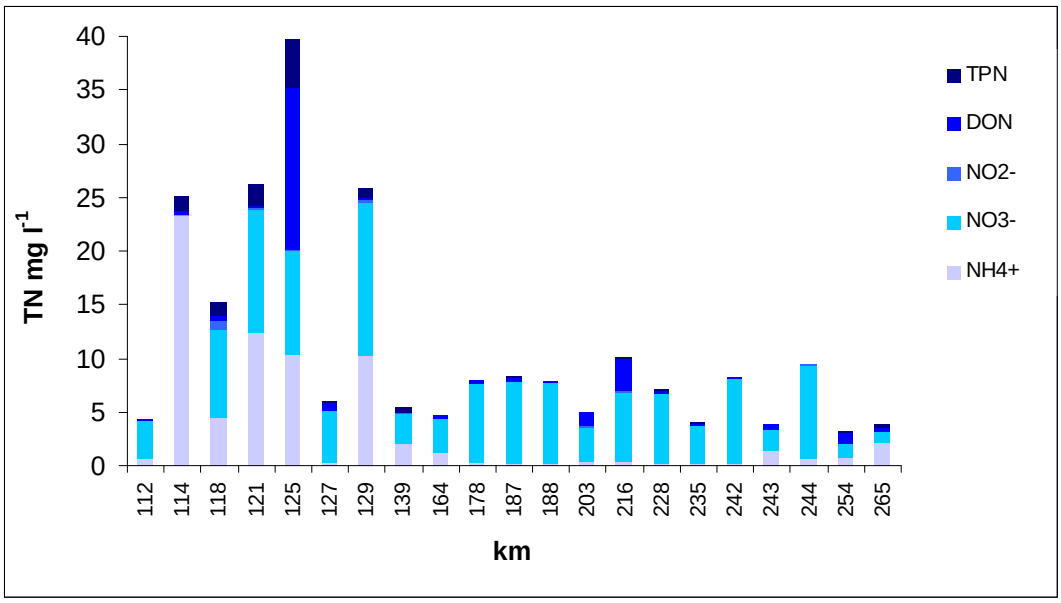



Campagna n° 12/2012 (Primavera)

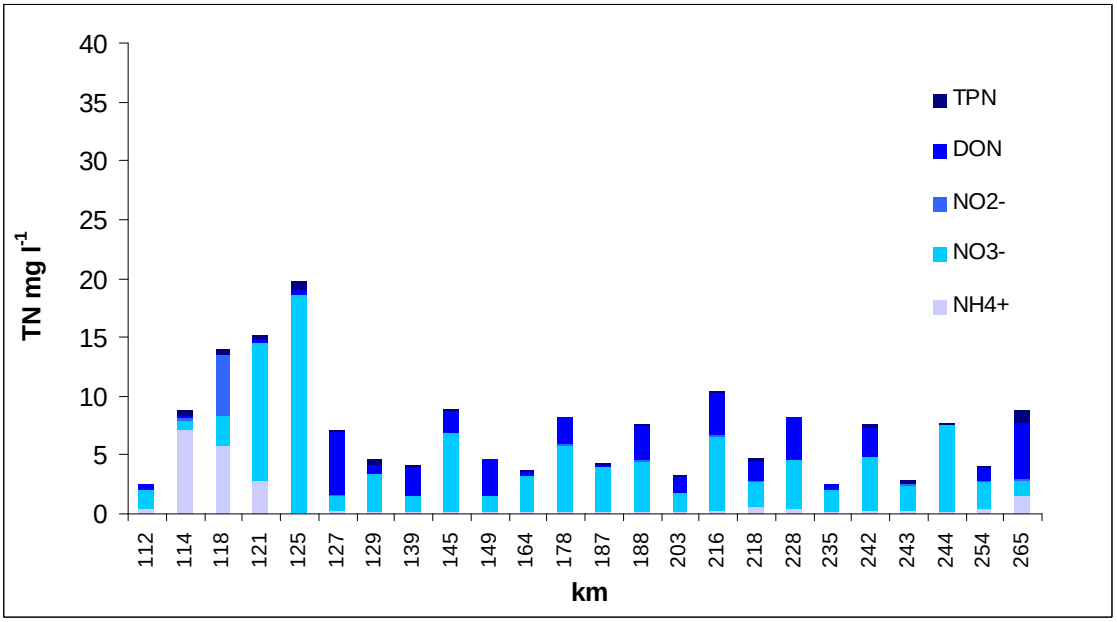
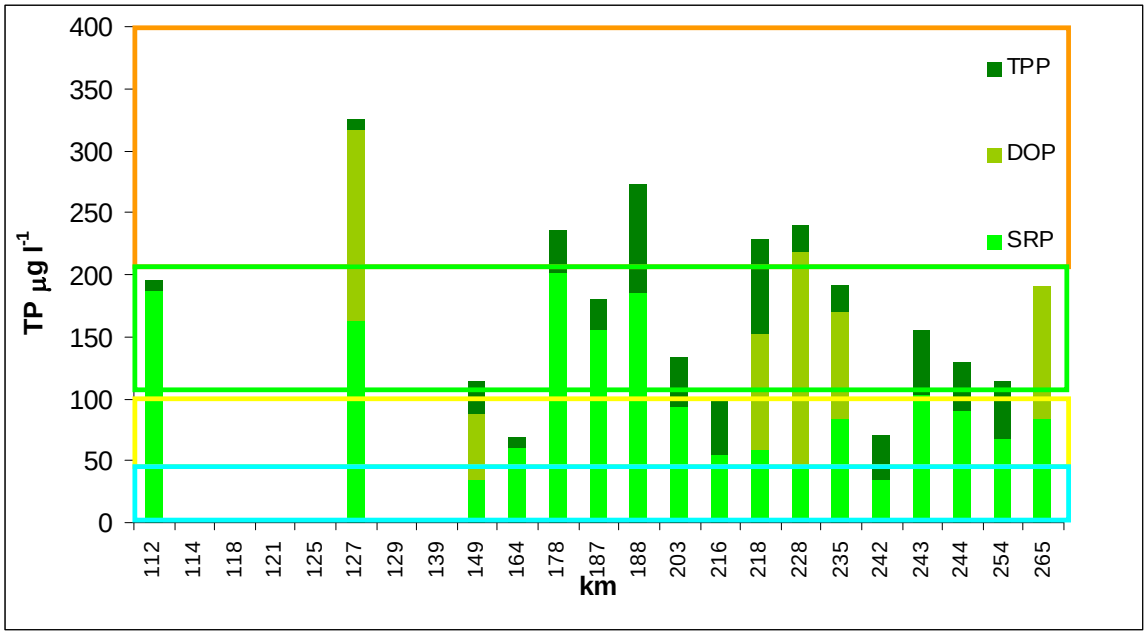
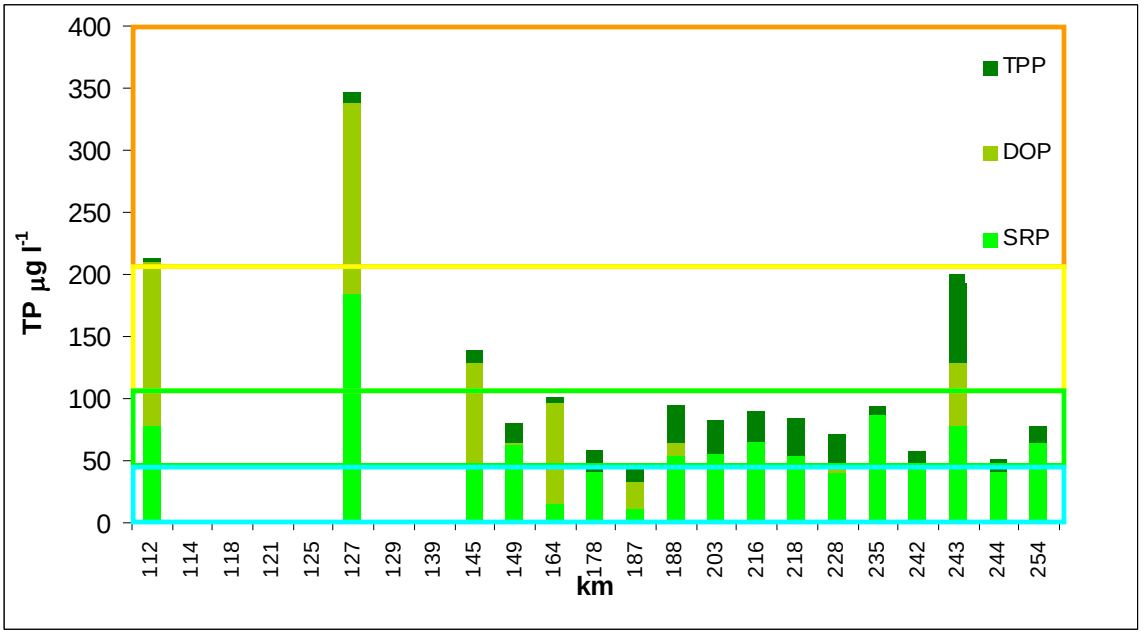



Fig. I - Concentrazione dell'azoto totale (mg N $l^{-1}$) negli immissari monitorati durante la campagna estiva 2010 (scenario 5%), autunnale 2010 (scenario >15%), invernale 2011 (scenario 15%) e primaverile 2011 (scenario 10%), individuati con la rispettiva localizzazione chilometrica lungo l'asta fluviale. Con le diverse gradazioni di blu sono rappresentate le forme dell'azoto analizzate: $NH_4^+$ azoto ammoniacale, $NO_3^-$ azoto nitrico, $NO_2^-$ azoto nitroso, DON azoto organico disciolto, TPN azoto totale particellato.

Campagna n° 9/2011 (Estate)




Campagna n° 10/2011 (Autunno)



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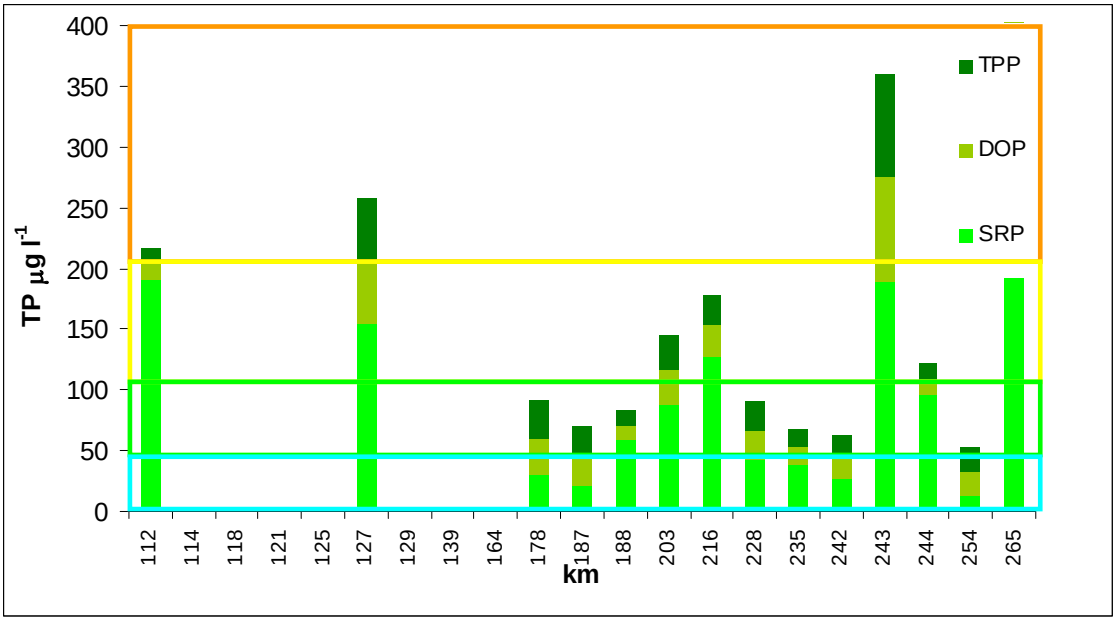



Campagna n° 12/2012 (Primavera)

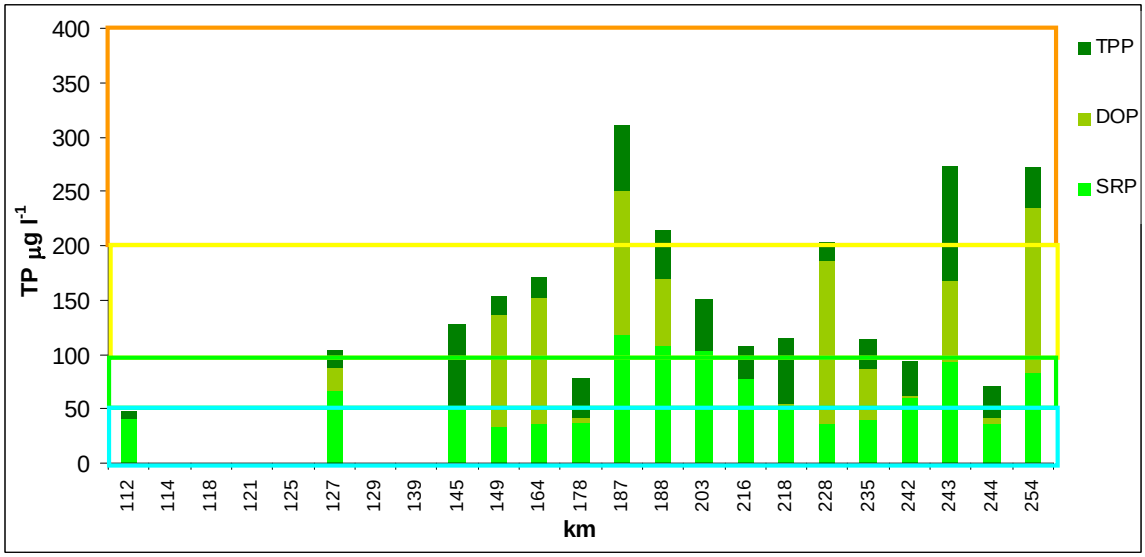
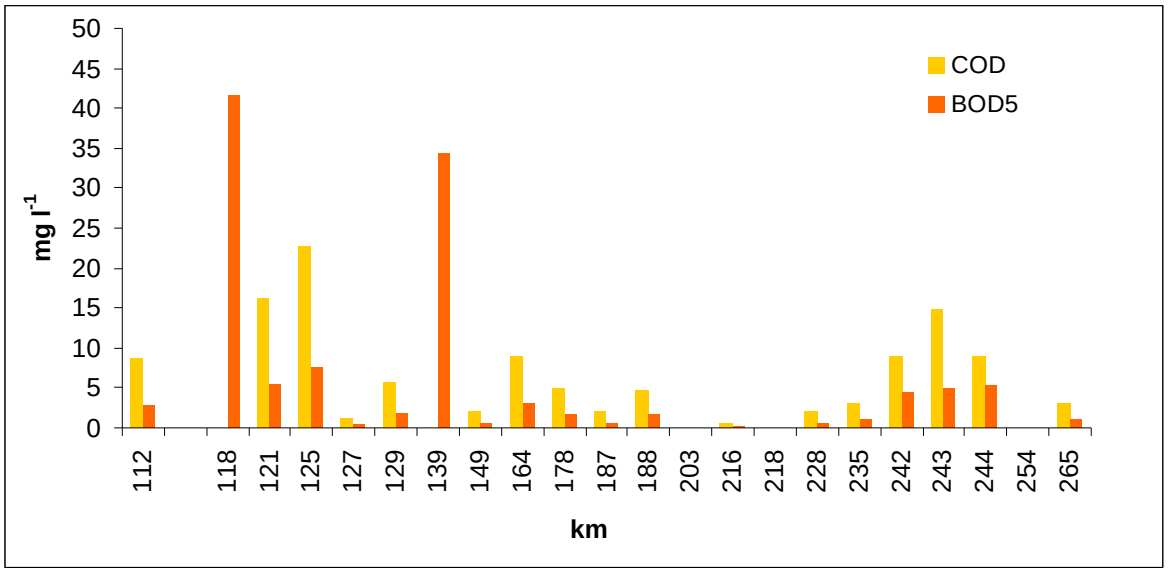


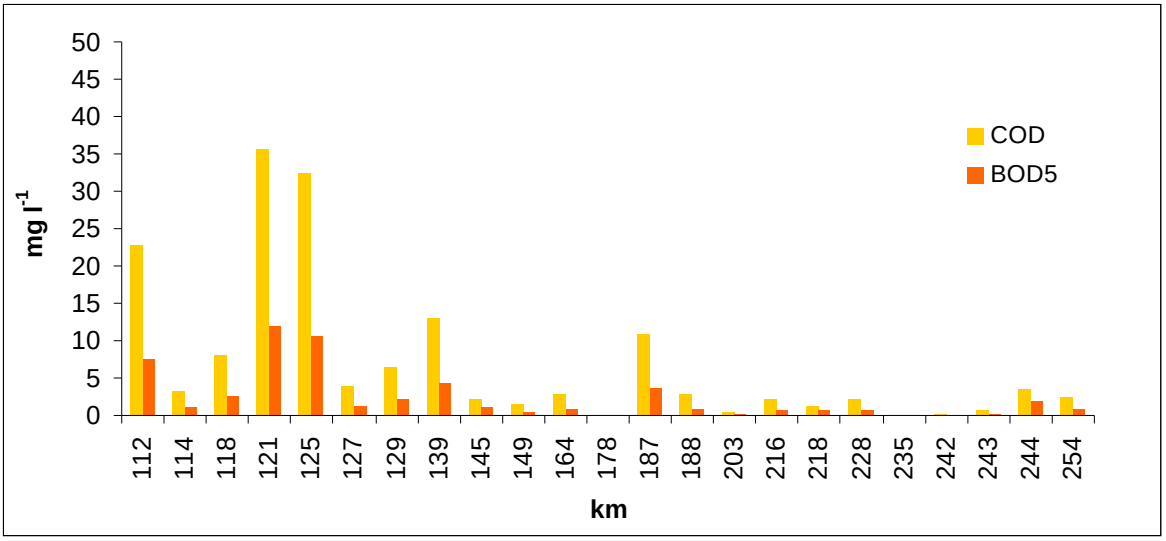

Fig. II - Concentrazione del fosforo totale (µg P $l^{-1}$) negli immissari monitorati durante la campagna estiva 2011 (scenario 5%), autunnale 2011 (scenario >15%), invernale 2012 (scenario 15%) e primaverile 2012 (scenario 10%), individuati con la rispettiva localizzazione chilometrica lungo l'asta fluviale. Con le diverse gradazioni di verde sono rappresentate le forme del fosforo totale analizzate: SRP fosforo reattivo solubile, DOP fosforo organico disciolto, TPP fosforo totale particellato. Le fasce colorate si riferiscono ai livelli dell'Indice LIMeco (livello 1 azzurro: elevato (non visibile nel grafico); livello 2 verde: buono; livello 3 giallo: sufficiente; livello 4 arancione: scarso; livello 5 rosso: cattivo). La concentrazione di SRP, DOP e TPP degli scarichi dei depuratori di Paratico, di Molino del

Comune, di Cividino, di Palazzolo sull'Oglio, Pontoglio e di Calcio (km 114, 118, 121, 125, 129, 139) non sono state riportate nel grafico relativo al campionamento estivo perché la loro somma o fosforo totale superano rispettivamente i 1500 µg P $l^{-1}$, 910 µg P $l^{-1}$, 2300 µg P $l^{-1}$, 690 µg P $l^{-1}$, 550 µg P $l^{-1}$, 600 µg P $l^{-1}$. e relativamente al campionamento autunnale perché il TP supera rispettivamente 1800 µg P $l^{-1}$, 3000 µg P $l^{-1}$, 2500 µg P $l^{-1}$, 2800 µg P $l^{-1}$, 550 µg P $l^{-1}$, 700 µg P $l^{-1}$. Per gli stessi scarichi dei depuratori non è stata riportata la concentrazione TP in inverno perché maggiore rispettivamente di 1200 µg P $l^{-1}$, 2300 µg P $l^{-1}$, 2500 µg P $l^{-1}$, 4600 µg P $l^{-1}$, 1000 µg P $l^{-1}$, 1300 µg P $l^{-1}$. Anche lo scolmatore di Genivolta (km 164) la concentrazione di TP è risultata maggiore di 400 µg P $l^{-1}$. Infine anche per il campionamento primaverile non state riportate la somma delle concentrazione di SRP, DOP e TPP degli scarichi dei depuratori di Paratico, di Molino del Comune, di Cividino, di Palazzolo sull'Oglio, Pontoglio e di Calcio e del Canale Fossola perché superiori rispettivamente a 1100 µg P $l^{-1}$, 900 µg P $l^{-1}$, 800 µg P $l^{-1}$, 1500 µg P $l^{-1}$, 600 µg P $l^{-1}$, 450 µg P $l^{-1}$, 450 µg P $l^{-1}$.

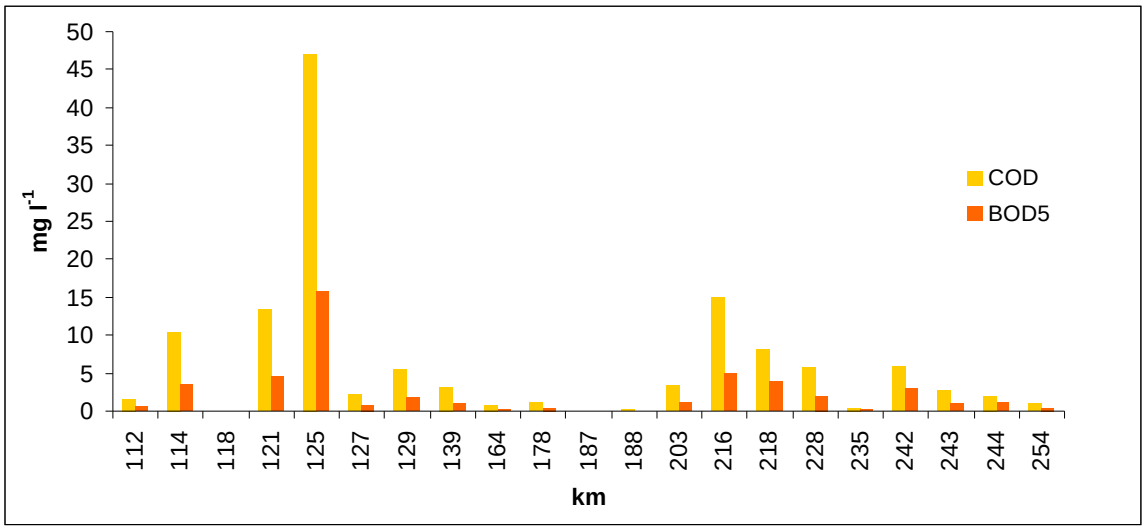
Campagna n° 9/2011 (Estate)




Campagna n° 10/2011 (Autunno)



Campagna n° 11/2012 (Inverno)




Campagna n° 12/2012 (Primavera)

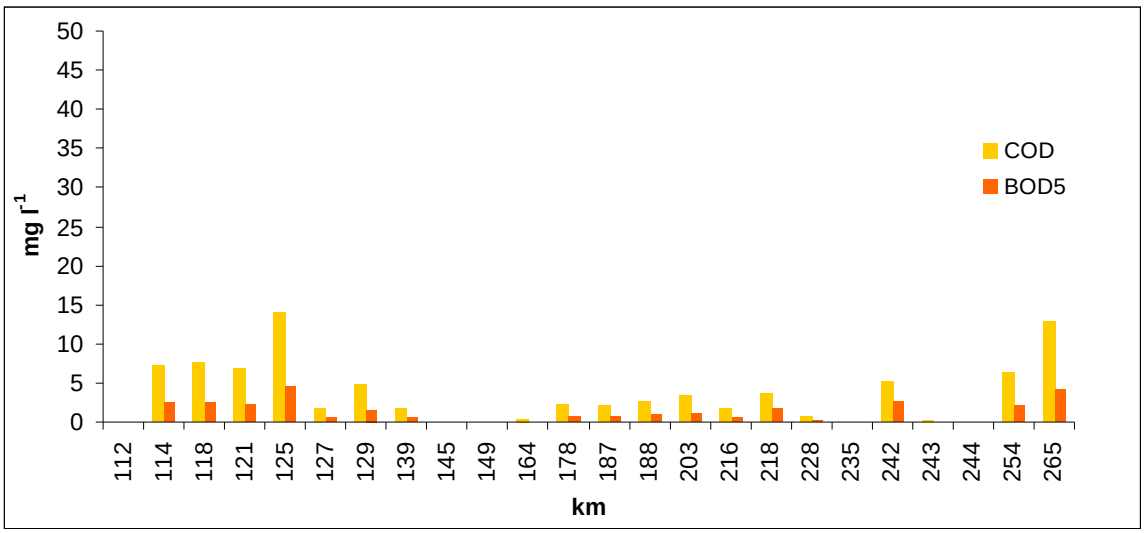
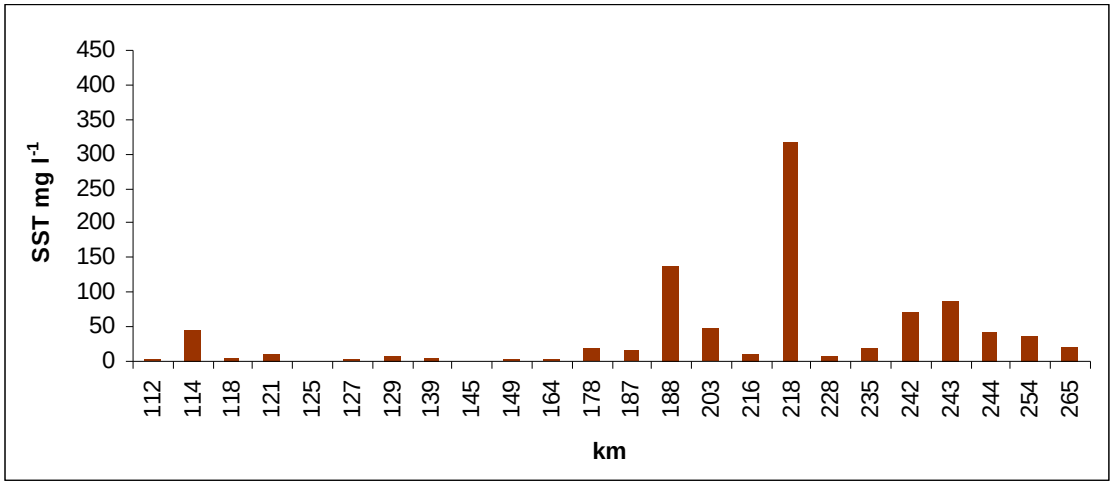



Fig. III - Domanda chimica di ossigeno, COD (mg $O_2$ $l^{-1}$), e domanda biologica di ossigeno, $BOD_5$ (mg $O_2$ $l^{-1}$) negli immissari monitorati durante la campagna estiva 2011 (scenario 5%), autunnale 2011 (scenario >15%), invernale 2012 (scenario 15%) e primaverile 2012 (scenario 10%). Le concentrazioni di COD e $BOD_5$ degli scarichi dei depuratori di Paratico (km 114), di Molino del Comune (km 118) e di Calcio (km139), non riportate nel grafico relativo al campionamento estivo, sono risultate essere maggiori rispettivamente di 200 mg $l^{-1}$ e 75 mg $l^{-1}$ per Paratico, di 100 mg $l^{-1}$ e 30 mg $l^{-1}$ per Molino del Comune e di 100 mg $l^{-1}$ e 40 mg $l^{-1}$ per Calcio. Le concentrazioni dello dello scarico del depuratore di Molino del Comune (km 118), non riportate nel grafico relativo al campionamento invernale, sono risultate rispettivamente maggiori di 50 mg $l^{-1}$ e 15 mg $l^{-1}$. Per il COD gli intervalli di concentrazione riferite ai livelli dell'indice LIM sono: ≤ 5 mg $O_2$ $l^{-1}$ livello 1 azzurro: ottimo; tra 5 e ≤10 mg $O_2$ $l^{-1}$ livello 2 verde: buono; tra 10 e ≤ 15 mg $O_2$ $l^{-1}$ livello 3 giallo: sufficiente; tra 15 e ≤ 25 mg $O_2$ $l^{-1}$ livello 4 arancione: scadente; ≥ 25 mg $O_2$ $l^{-1}$ livello 5 rosso: pessimo). Per il $BOD_5$ gli intervalli di concentrazione riferite ai livelli dell'indice LIM sono: ≤ 2.5 mg $O_2$ $l^{-1}$ livello 1 azzurro: ottimo; tra 2.5 e ≤4 mg $O_2$ $l^{-1}$ livello 2 verde: buono; tra 4 e ≤ 8 mg $O_2$ $l^{-1}$ livello 3 giallo:

sufficiente; tra 8 e ≤ 15 mg $O_2$ $l^{-1}$ livello 4 arancione: scadente; ≥ 15 mg $O_2$ $l^{-1}$ livello 5 rosso: pessimo).

Campagna n° 9/2011 (Estate)

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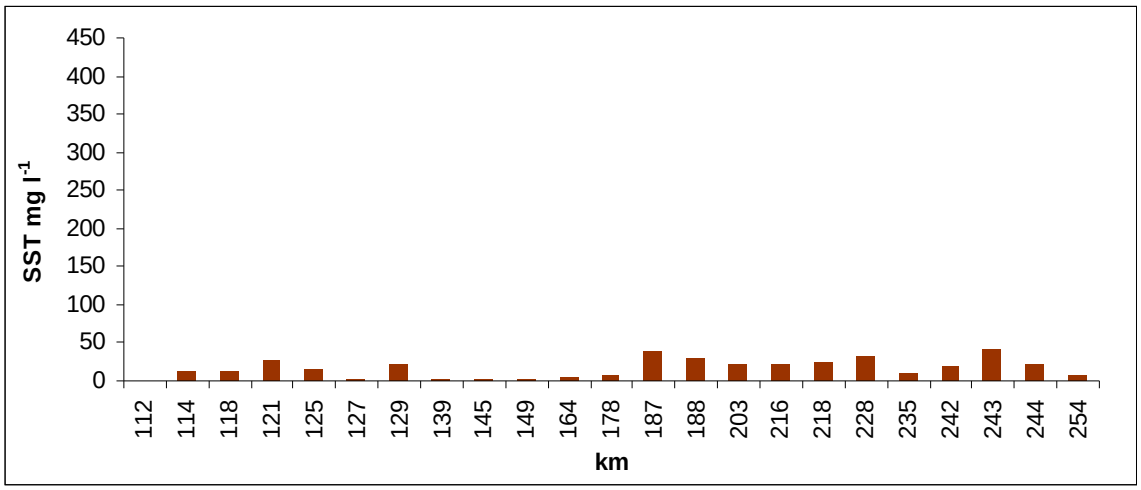

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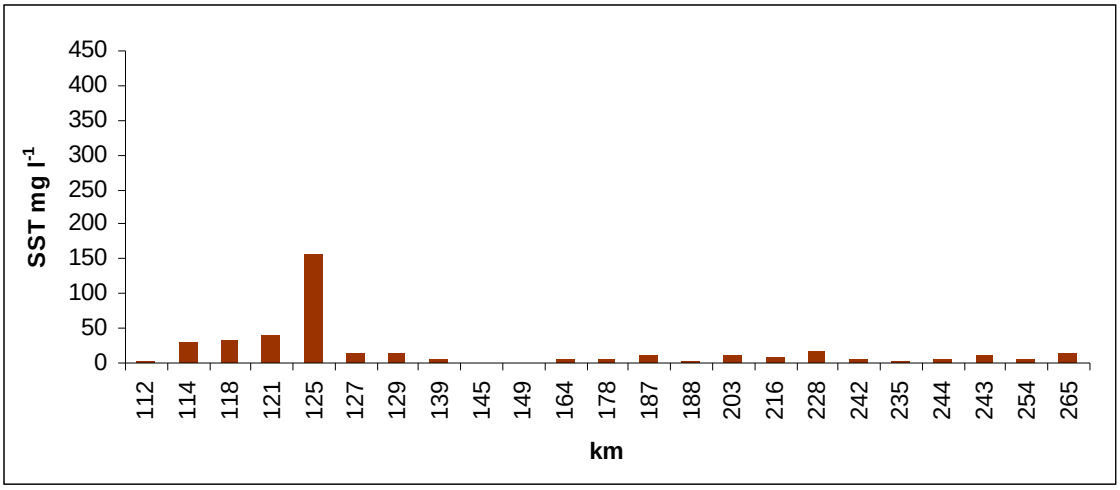


Campagna n° 12/2012 (Primavera)

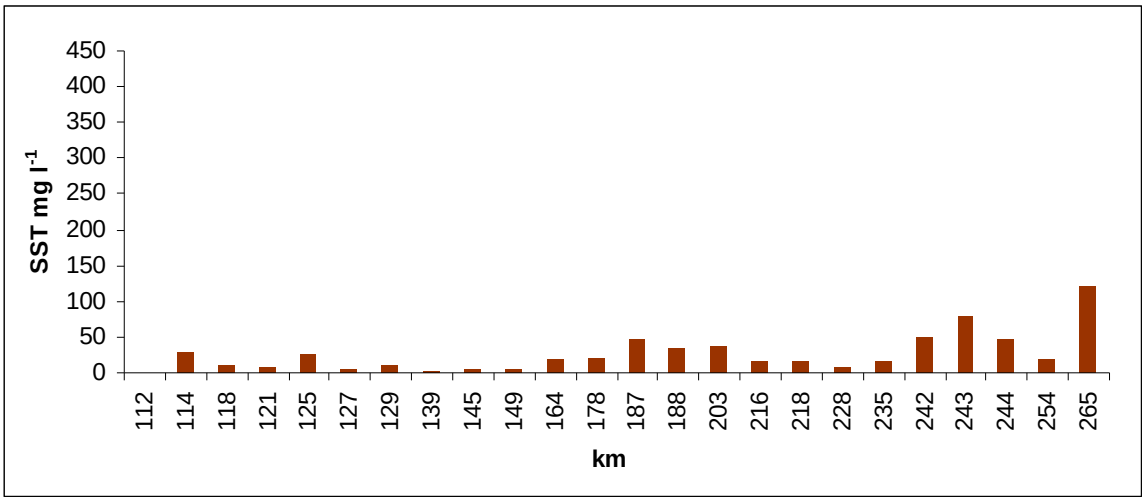


Fig. IV - Solidi sospesi totali (mg $l^{-1}$) negli immissari monitorati durante la campagna estiva 2011 (scenario 5%), autunnale 2011 (scenario >15%), invernale 2012 (scenario 15%) e primaverile 2012 (scenario 10%).

## Correlazioni di Kendall tra le componenti principali e i parametri chimico-fisici.

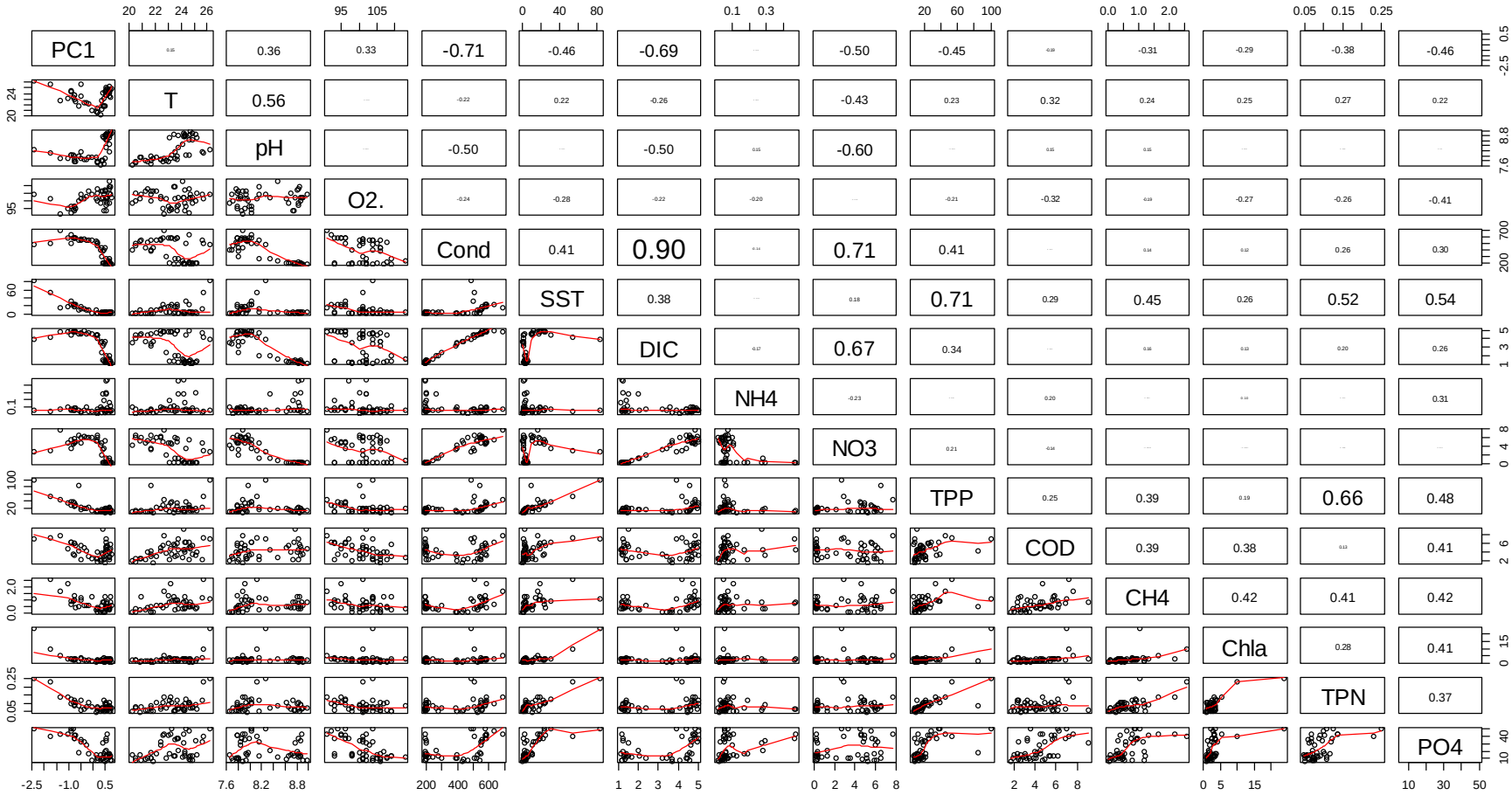


Fig. V - Correlazione di Kendall tra PC1 e i parametri chimico-fisici di origine della stagione estiva. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC1 e i parametri.

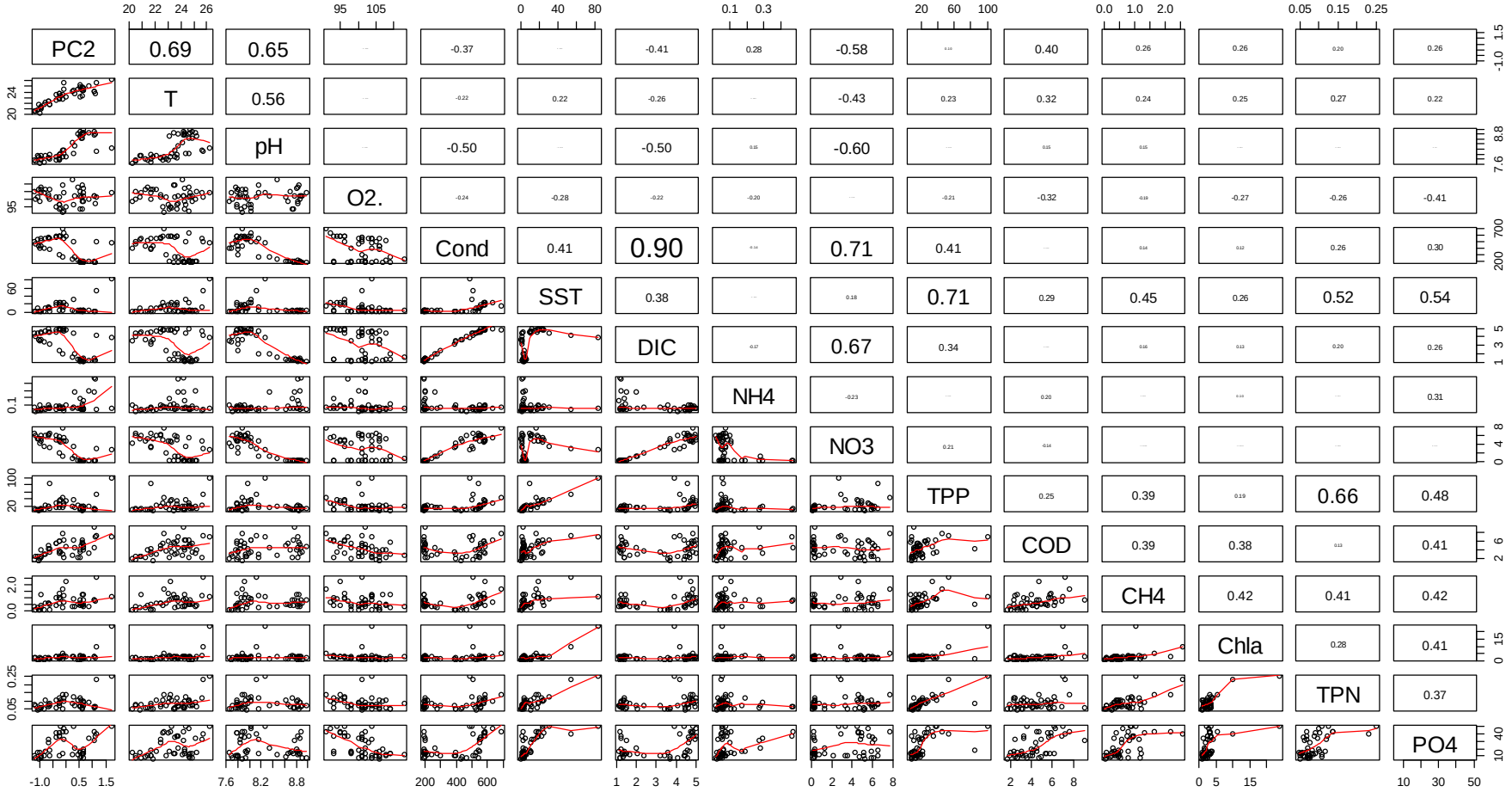


Fig. VI - Correlazione di Kendall tra PC2 e i parametri chimico-fisici di origine della stagione estiva. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC2 e i parametri.

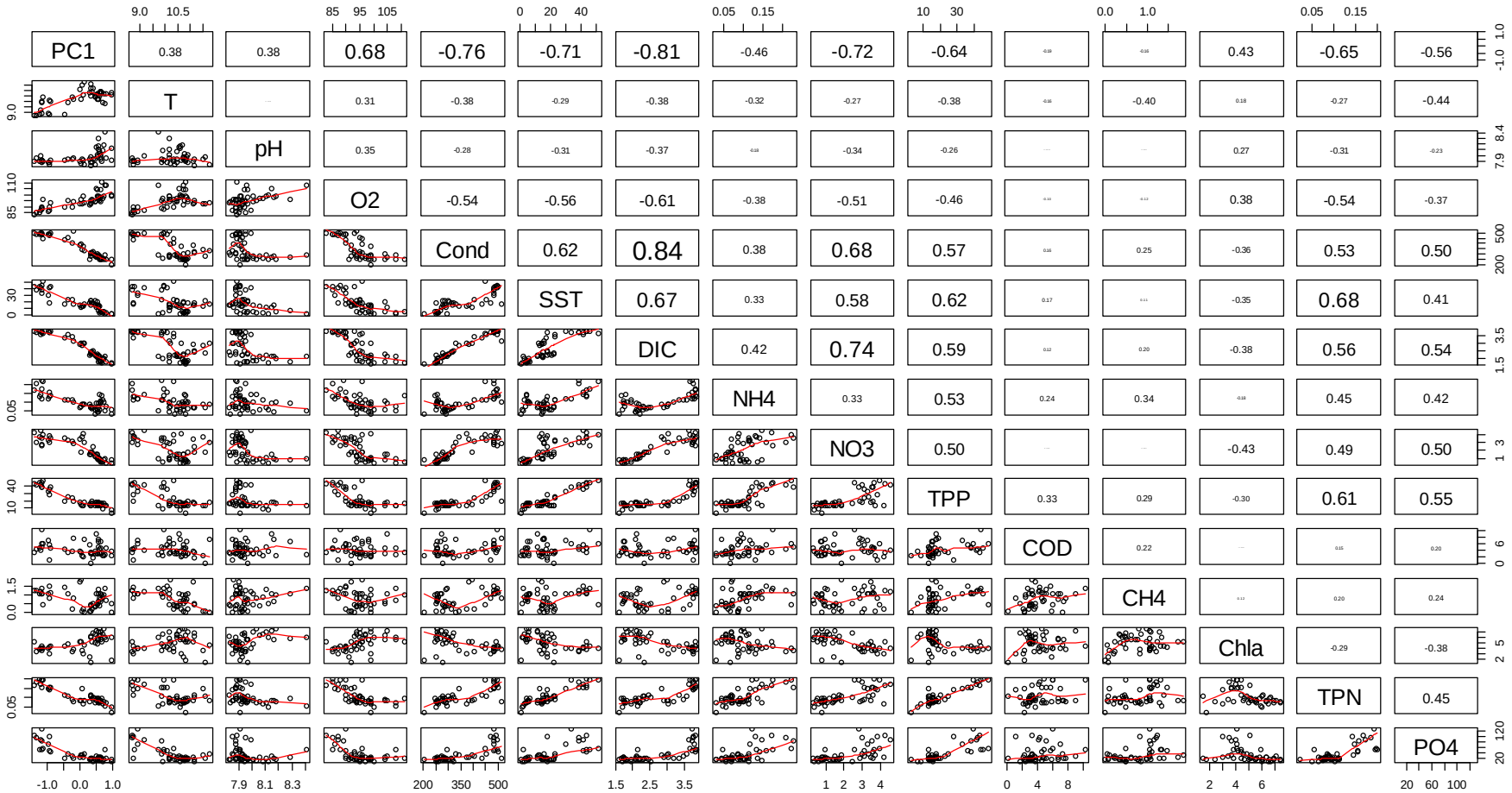


Fig. VII - Correlazione di Kendall tra PC1 e i parametri chimico-fisici di origine della stagione autunnale. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC1 e i parametri.

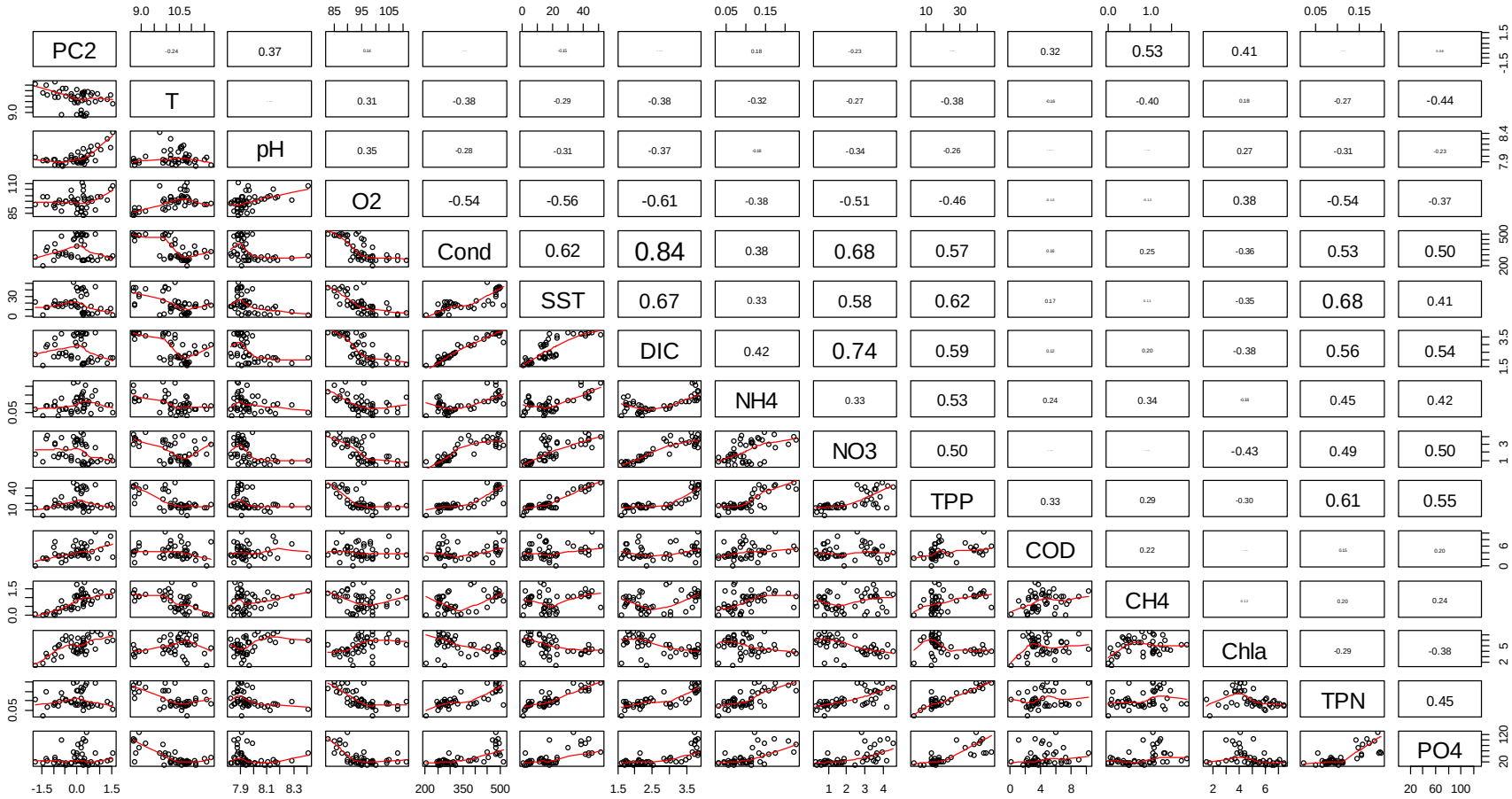


Fig. VIII - Correlazione di Kendall tra PC2 e i parametri chimico-fisici di origine della stagione autunnale. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC2 e i parametri.

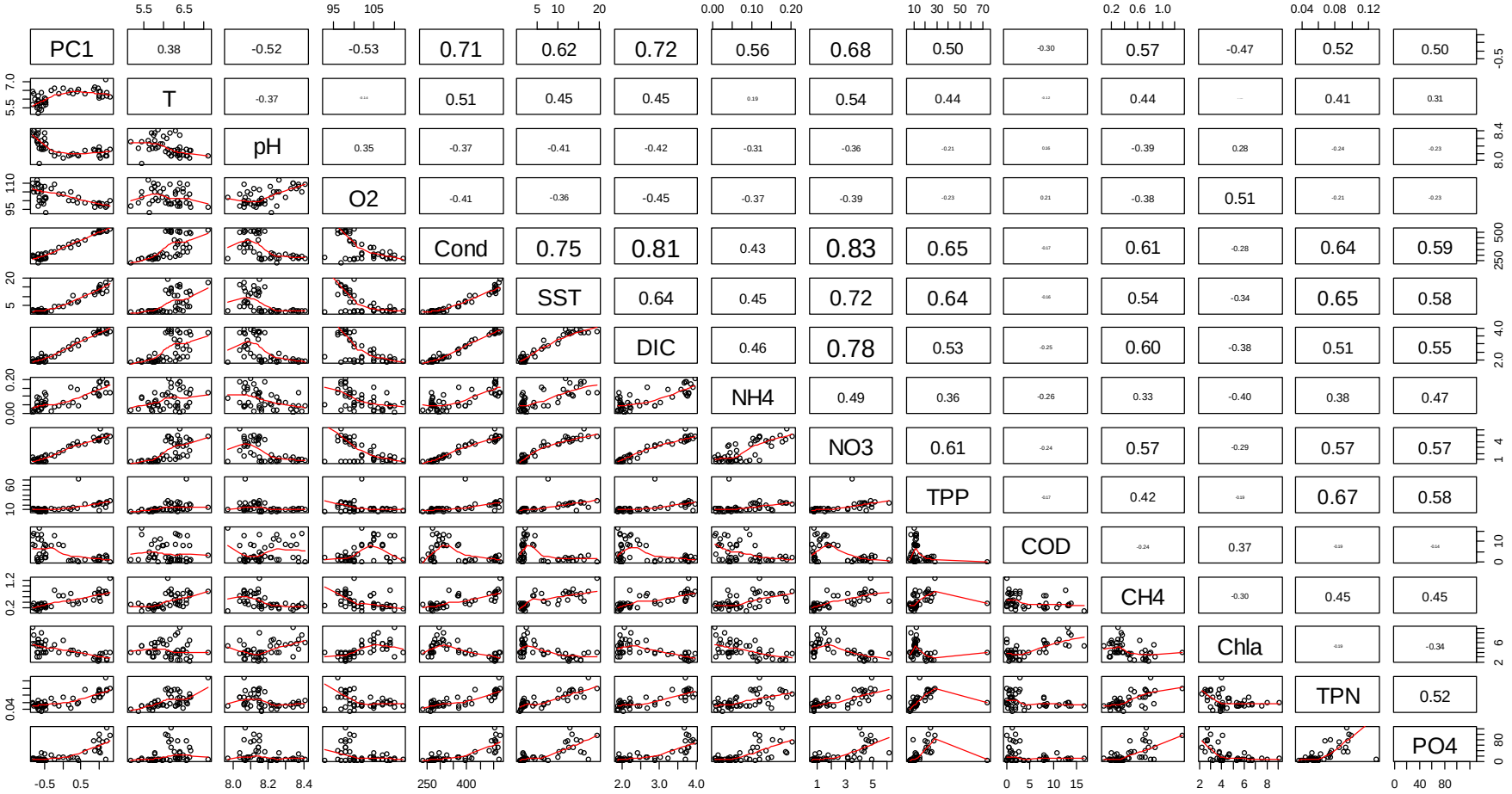


Fig. IX - Correlazione di Kendall tra PC1 e i parametri chimico-fisici di origine della stagione invernale. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC1 e i parametri.

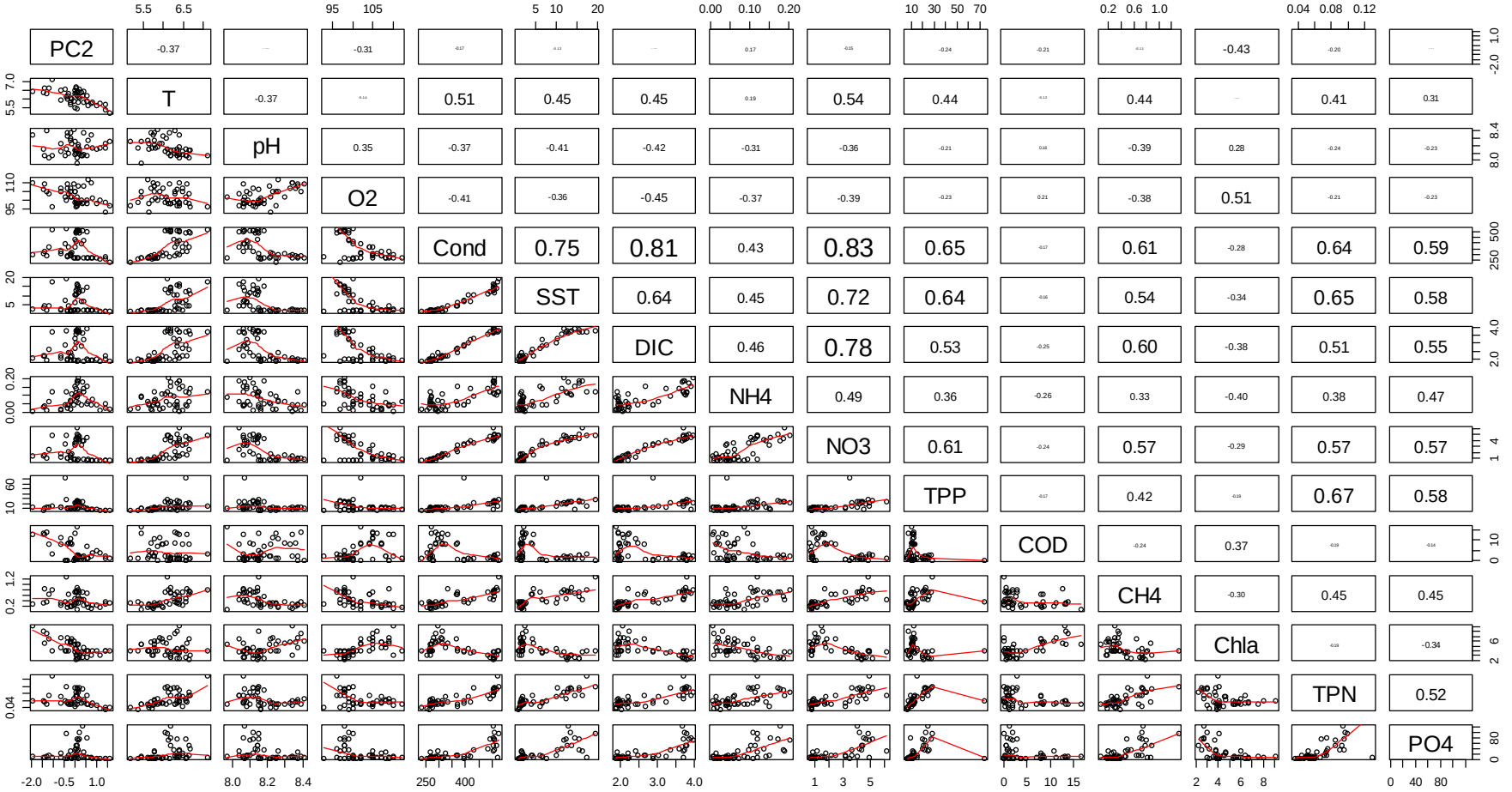


Fig. X - Correlazione di Kendall tra PC2 e i parametri chimico-fisici di origine della stagione invernale. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC2 e i parametri.

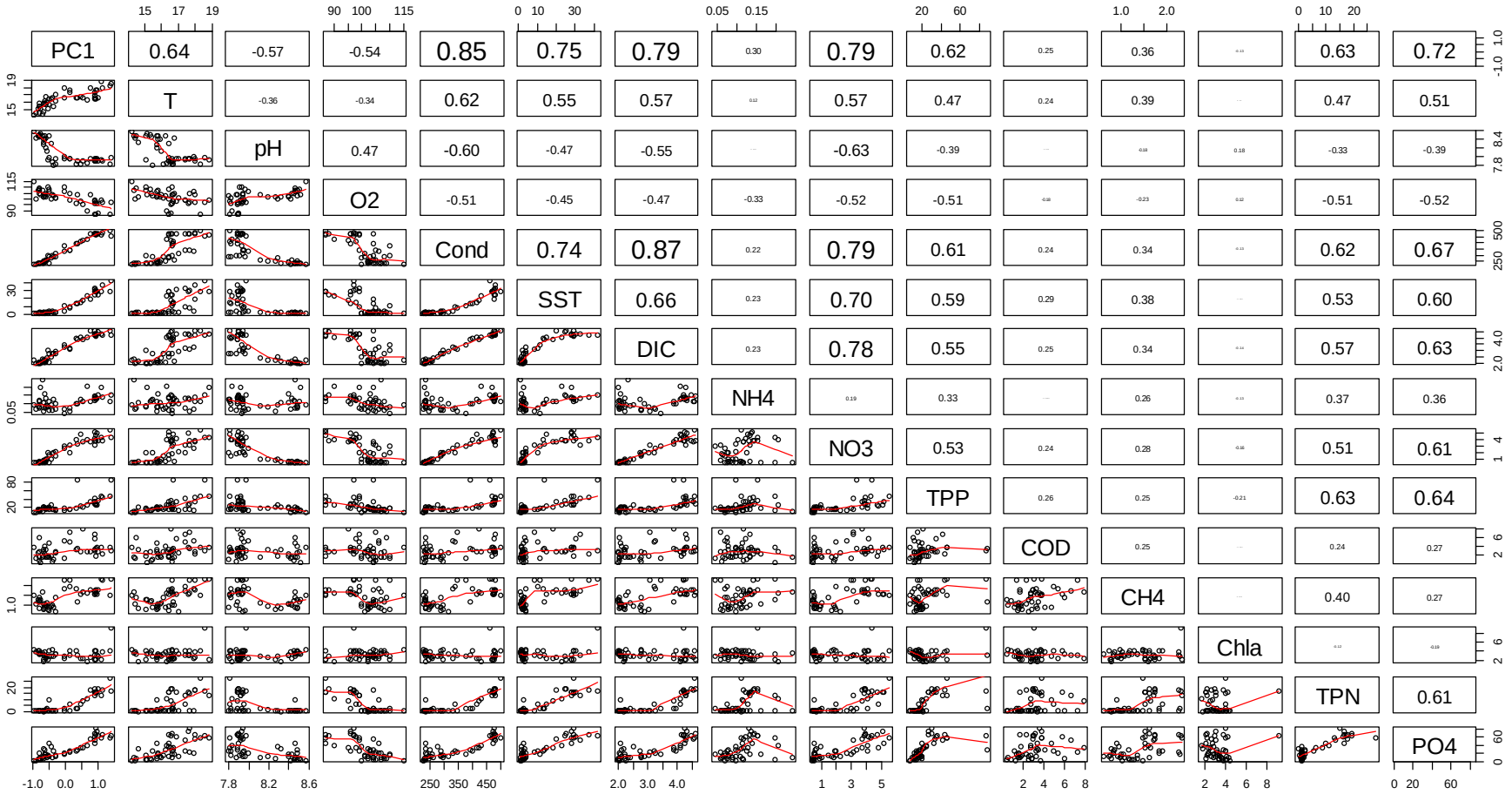


Fig. XI - Correlazione di Kendall tra PC1 e i parametri chimico-fisici di origine della stagione primaverile. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC1 e i parametri.

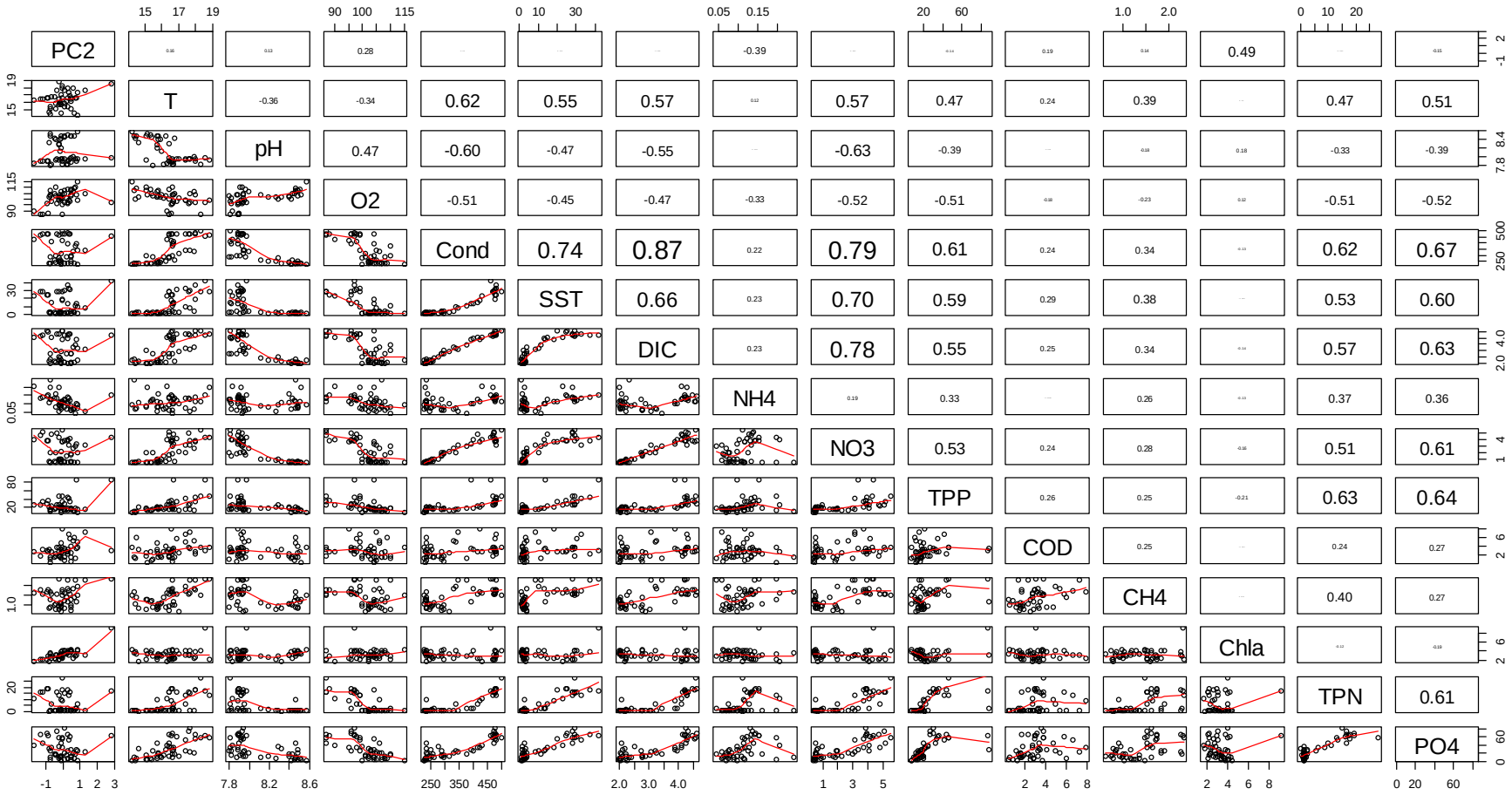


Fig. XII - Correlazione di Kendall tra PC2 e i parametri chimico-fisici di origine della stagione primaverile. Per ogni coppia di dati su cui è stato effettuato il test viene rappresentato l'andamento dei valori, nei riquadri a sinistra, e il valore τ di correlazione in quelli di destra. Ciò che interessa in questa sede sono i grafici della prima colonna e i τ della prima riga ovvero la correlazione tra PC2 e i parametri.

# ALLEGATO II

## AZIONE 3: MONITORAGGIO BIOLOGICO

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| II.B | DIATOMEE: ELENCO DEI TAXA | pag.10 |
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# ALLEGATO II
# AZIONE 3: MONITORAGGIO BIOLOGICO

## MACROINVERTEBRATI –ELENCO DEI TAXA

Tab I - Elenco faunistico del campionamento estivo (n° 9/11): tratti guadabili.

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti Guadabili - SURBER - Multi habitat proporzionale**
**IdroEcoregione (HER): 6 Pianura Padana: 0,5 m²**
**IdroEcoregione (HER): 2 Prealpi: 1 m² (staz 3 e 8)**

**ESTATE 2011**

| ELENCO TAXA | | 3 | | 18 | | 24 | | 26 | | 31 | | 36 | | 44 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT |
| **Plecotteri** | | | 4 | | 0 | | 0 | | 45 | | 174 | | 0 | | 0 |
| Leuctridae | *Leuctra* | 4 | | 0 | | 0 | | 45 | | 174 | | 0 | | 0 | |
| Taeniopterygidae | *Brachyptera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Efemerotteri** | | | 219 | | 46 | | 621 | | 2421 | | 1695 | | 420 | | 193 |
| | *Baetis* | 211 | | 0 | | 606 | | 1803 | | 1405 | | 376 | | 95 | |
| | *Centroptilum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Caenis* | 6 | | 46 | | 0 | | 434 | | 156 | | 0 | | 93 | |
| | *Ecdyonurus* | 0 | | 0 | | 0 | | 0 | | 2 | | 8 | | 0 | |
| | *Ephemera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ephemerella* | 1 | | 0 | | 15 | | 184 | | 108 | | 36 | | 5 | |
| | *Leptophlebia* sp. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Heptagenia* | 0 | | 0 | | 0 | | 0 | | 24 | | 0 | | 0 | |
| | Heptageniiadae n.i. | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Potamanthus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Paraleptophlebia* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricotteri** | | | 378 | | 23 | | 372 | | 945 | | 966 | | 48 | | 23 |
| | Hydropsychidae | 127 | | 1 | | 365 | | 643 | | 698 | | 34 | | 0 | |
| | Hydroptilidae | 7 | | 4 | | 0 | | 18 | | 33 | | 6 | | 0 | |
| | Ecnomidae | 2 | | 2 | | 7 | | 0 | | 0 | | 0 | | 0 | |
| | Lepidostomatidae | 0 | | 0 | | 0 | | 11 | | 0 | | 0 | | 0 | |
| | Leptoceridae | 17 | | 13 | | 0 | | 3 | | 3 | | 1 | | 0 | |
| | Limnephilidae | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | | 0 | |
| | Glossosomatidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Odontoceridae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Polycentropodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Psychomyidae | 223 | | 3 | | 0 | | 268 | | 220 | | 7 | | 23 | |
| | Phryganeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Rhyacophilidae | 2 | | 0 | | 0 | | 2 | | 8 | | 0 | | 0 | |
| | Hydroptilidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tricotteri n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Eterotteri** | | | 0 | | 1 | | 0 | | 3 | | 0 | | 0 | | 0 |
| | *Aphelocheirus* | 0 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | |
| | *Micronecta* | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Coleotteri** | | | 15 | | 1 | | 14 | | 99 | | 168 | | 7 | | 22 |
| | Dryopidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Elmidae | 15 | | 1 | | 14 | | 99 | | 168 | | 7 | | 22 | |
| | Gyrinidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Cnidari** | | | 22 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| | *Hydra* | 22 | | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Ditteri** | | | 169 | | 59 | | 196 | | 172 | | 372 | | 78 | | 332 |
| | Athericidae | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | | 0 | |
| | Dolichopodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Chironomidae | 117 | | 58 | | 192 | | 167 | | 311 | | 78 | | 327 | |
| | Ceratopogonidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Empididae | 6 | | 0 | | 0 | | 0 | | 18 | | 0 | | 0 | |
| | Limonidae | 0 | | 0 | | 4 | | 4 | | 2 | | 0 | | 3 | |
| | Psychodidae | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tabanidae | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | |
| | Tipulidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Sciomyzidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Simulidae | 45 | | 0 | | 0 | | 1 | | 37 | | 0 | | 0 | |

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti Guadabili - SURBER - Multi habitat proporzionale**
**IdroEcoregione (HER): 6 Pianura Padana: 0,5 $m^2$**
**IdroEcoregione (HER): 2 Prealpi: 1 $m^2$ (staz 3 e 8)**

**ESTATE 2011**

| ELENCO TAXA | | 3 | | 18 | | 24 | | 26 | | 31 | | 36 | | 44 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT |
| **Gasteropodi** | | | 24 | | 2 | | 8 | | 200 | | 4 | | 4 | | 2 |
| | Ancylidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Acroloxidae | 1 | | 0 | | 0 | | 1 | | 0 | | 0 | | 1 | |
| | Bithyniidae | 8 | | 1 | | 0 | | 6 | | 4 | | 0 | | 0 | |
| | Planorbidae | 0 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | |
| | Lymnaeidae | 2 | | 0 | | 0 | | 1 | | 0 | | 4 | | 1 | |
| | Physa | 2 | | 0 | | 0 | | 32 | | 0 | | 0 | | 0 | |
| | Neritidae | 0 | | 0 | | 8 | | 138 | | 0 | | 0 | | 0 | |
| | Viviparidae | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Valvatidae | 10 | | 1 | | 0 | | 19 | | 0 | | 0 | | 0 | |
| **Bivalvi** | | | 42 | | 0 | | 33 | | 13 | | 12 | | 1 | | 1 |
| | Corbiculidae | 0 | | 0 | | 0 | | 6 | | 12 | | 0 | | 1 | |
| | Dreissenidae | 42 | | 0 | | 29 | | 3 | | 0 | | 0 | | 0 | |
| | Pisidiidae | 0 | | 0 | | 0 | | 4 | | 0 | | 1 | | 0 | |
| | Sphaeriidae | 0 | | 0 | | 4 | | 0 | | 0 | | 0 | | 0 | |
| | Unionidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Crostacei** | | | 74 | | 21 | | 6 | | 7 | | 625 | | 316 | | 488 |
| | Asellidae | 73 | | 21 | | 0 | | 6 | | 4 | | 0 | | 0 | |
| | Cambaridae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Gammaridae | 1 | | 0 | | 6 | | 1 | | 621 | | 316 | | 488 | |
| | Palaemonidae | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Oligocheti** | | | 3 | | 4 | | 0 | | 13 | | 58 | | 48 | | 0 |
| | Naididae | 3 | | 4 | | 0 | | 5 | | 20 | | 48 | | 0 | |
| | Enchytraeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbricidae | 0 | | 0 | | 0 | | 8 | | 32 | | 0 | | 0 | |
| | Lumbriculidae | 0 | | 0 | | 0 | | 0 | | 6 | | 0 | | 0 | |
| | Tubificidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Irudinei** | | | 0 | | 2 | | 16 | | 7 | | 4 | | 0 | | 0 |
| | *Glossiphonia* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Helobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Erpobdella* | 0 | | 0 | | 11 | | 0 | | 4 | | 0 | | 0 | |
| | *Dina* | 0 | | 0 | | 5 | | 0 | | 0 | | 0 | | 0 | |
| | Erpobdellidae n.i. | 0 | | 2 | | 0 | | 7 | | 0 | | 0 | | 0 | |
| | *Piscicola* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Odonati** | | | 1 | | 2 | | 2 | | 11 | | 1 | | 2 | | 2 |
| | *Anax* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Aeschna* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Calopterigidae | *Calopteryx* | 0 | | 0 | | 0 | | 1 | | 0 | | 2 | | 0 | |
| | Coenagrionidae n.i. | 0 | | 1 | | 2 | | 10 | | 0 | | 0 | | 0 | |
| | *Coenagrion* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Gomphidae | *Ophiogomphus* | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | |
| | *Stylurus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Gomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ischnura* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ladona* | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Onychogomphus* | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | |
| | *Platycnemis* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Somatochlora* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Anisottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Zigottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricladi** | | | 29 | | 0 | | 0 | | 52 | | 1 | | 0 | | 2 |
| | *Dugesia* | 26 | | 0 | | 0 | | 52 | | 1 | | 0 | | 2 | |
| | *Planaria* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dendrocoelum* | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Nematodi** | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Idracaro** | | 19 | | 13 | | 0 | | 19 | | | | 0 | | 6 | |
| **Lepidotteri** | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Altro/note** | microcrostacei | no | | no | | no | | no | | no | | no | | no | |
| **TOTALE Individui** | | 999 | | 175 | | 1268 | | 4007 | | 4080 | | 924 | | 1071 | |

Tab. II - Elenco faunistico del campionamento estivo (n° 9/11): tratti non guadabili.

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti NON Guadabili**
**Metodo Substrati Artificiale ( S.A. di faesite)**
**Unità di Campionamento: 5 S.A. (0,5 m²)**
**IdroEcoregione (HER): 6 Pianura Padana**

**ESTATE 2011**

| ELENCO TAXA | | 1A | | 1 B | | 6A | | 7A | | 7B | | 8A | | 53A | | 53B | | 59A | | 59B | | 68A | | 80A | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT |
| **Plecotteri** | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 3 |
| | *Leuctra* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 3 | |
| | *Brachyptera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Efemerotteri** | | | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 78 | | 271 | | 90 | | 61 | | 1027 | | 167 |
| | *Baetis* | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 40 | | 38 | | 42 | | 15 | | 17 | | 61 | |
| | *Centroptilum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Caenis* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 14 | | 161 | | 7 | | 0 | | 221 | | 0 | |
| | *Ecdyonurus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 5 | | 0 | | 23 | | 11 | | 0 | | 70 | |
| | *Ephemera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ephemerella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | |
| | *Heptagenia* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 19 | | 71 | | 18 | | 35 | | 789 | | 36 | |
| | Heptageniidae n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Potamanthus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Paraleptophlebia* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricotteri** | | | 10 | | 118 | | 0 | | 69 | | 14 | | 2 | | 285 | | 188 | | 178 | | 93 | | 2428 | | 456 |
| | Hydropsychidae | 0 | | 0 | | 0 | | 17 | | 7 | | 2 | | 266 | | 140 | | 163 | | 82 | | 2415 | | 449 | |
| | Hydroptilidae | 0 | | 29 | | 0 | | 8 | | 0 | | 0 | | 5 | | 7 | | 11 | | 0 | | 2 | | 0 | |
| | Ecnomidae | 4 | | 81 | | 0 | | 29 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lepidostomatidae | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Leptoceridae | 3 | | 8 | | 0 | | 15 | | 5 | | 0 | | 1 | | 39 | | 4 | | 0 | | 11 | | 0 | |
| | Limnephilidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Glossosomatidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Polycentropodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Psychomyidae | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 13 | | 2 | | 0 | | 11 | | 0 | | 0 | |
| | Phyganeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Rhyacophilidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 7 | |
| | Tricotteri n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Eterotteri** | | | 0 | | 0 | | 0 | | 5 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| | *Aphelocheirus* | 0 | | 0 | | 0 | | 5 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Micronecta* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Coleotteri** | | | 0 | | 6 | | 0 | | 0 | | 1 | | 0 | | 34 | | 37 | | 0 | | 8 | | 113 | | 33 |
| | Helophoridae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Dytiscidae | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Dryopidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 18 | | 22 | |
| | Elmidae | 0 | | 6 | | 0 | | 0 | | 0 | | | | 34 | | 37 | | 0 | | 8 | | 92 | | 11 | |
| | Gyrinidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 3 | | 0 | |
| **Cnidari** | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| | *Hydra* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Ditteri** | | | 101 | | 35 | | 28 | | 205 | | 64 | | 30 | | 97 | | 849 | | 135 | | 48 | | 1145 | | 95 |
| | Anthomyidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 3 | | 0 | |
| | Dolichopodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Chironomidae | 101 | | 35 | | 28 | | 189 | | 61 | | 27 | | 62 | | 575 | | 121 | | 22 | | 905 | | 81 | |
| | Ceratopogonidae | 0 | | 0 | | 0 | | 12 | | 0 | | 0 | | 0 | | 53 | | 0 | | 0 | | 0 | | 0 | |
| | Empididae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 55 | | 0 | |
| | Limonidae | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Psychodidae | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tabanidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | |
| | Tipulidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Sciomyizidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Stratiomyidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Simulidae | 0 | | 0 | | 0 | | 4 | | 2 | | 2 | | 35 | | 219 | | 14 | | 26 | | 182 | | 14 | |

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti NON Guadabili**
**Metodo Substrati Artificiale ( S.A. di faesite)**
**Unità di Campionamento: 5 S.A. (0,5 m$^2$)**
**IdroEcoregione (HER): 6 Pianura Padana**

**ESTATE 2011**

| ELENCO TAXA | | 1A | | 1 B | | 6A | | 7A | | 7B | | 8A | | 53A | | 53B | | 59A | | 59B | | 68A | | 80A | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT | N° Ind. | TOT |
| **Gasteropodi** | | | 40 | | 180 | | 37 | | 214 | | 293 | | 95 | | 0 | | 10 | | 0 | | 0 | | 1 | | 52 |
| | Ancylidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Acroloxidae | 0 | | 1 | | 1 | | 13 | | 11 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Bithyniidae | 17 | | 110 | | 6 | | 77 | | 164 | | 95 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Planorbidae | 0 | | 0 | | 0 | | 4 | | 14 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 8 | |
| | Lymnaeidae | 0 | | 4 | | 14 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | | 0 | | 13 | |
| | Physidae | 23 | | 10 | | 4 | | 73 | | 86 | | 0 | | 0 | | 10 | | 0 | | 0 | | 0 | | 8 | |
| | Neritidae | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 23 | |
| | Viviparidae | 0 | | 9 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Valvatidae | 0 | | 45 | | 12 | | 47 | | 18 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | |
| **Bivalvi** | | | 15 | | 62 | | 6 | | 31 | | 26 | | 2 | | 2 | | 3 | | 1 | | 0 | | 0 | | 0 |
| | Corbiculidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | | 0 | |
| | Dreissenidae | 15 | | 62 | | 6 | | 25 | | 9 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Pisidiidae | 0 | | 0 | | 0 | | 6 | | 17 | | 0 | | 2 | | 0 | | 1 | | 0 | | 0 | | 0 | |
| | Sphaeriidae | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Unionidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Crostacei** | | | 10 | | 25 | | 19 | | 50 | | 23 | | 11 | | 8 | | 48 | | 25 | | 15 | | 123 | | 94 |
| | Asellidae | 4 | | 22 | | 3 | | 11 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Cambaridae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Gammaridae | 6 | | 3 | | 16 | | 39 | | 23 | | 11 | | 8 | | 47 | | 25 | | 15 | | 123 | | 94 | |
| | Niphargidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | |
| | Palaemonidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Oligocheti** | | | 2 | | 196 | | 70 | | 184 | | 788 | | 31 | | 68 | | 158 | | 0 | | 0 | | 25 | | 0 |
| | Naididae | 0 | | 196 | | 64 | | 168 | | 170 | | 31 | | 68 | | 138 | | 0 | | 0 | | 24 | | 0 | |
| | Enchytraeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbricidae | 0 | | 0 | | 0 | | 0 | | 43 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbriculidae | 2 | | 0 | | 6 | | 12 | | 417 | | 0 | | 0 | | 5 | | 0 | | 0 | | 1 | | 0 | |
| | Tubificidae | 0 | | 0 | | 0 | | 4 | | 158 | | 0 | | 0 | | 12 | | 0 | | 0 | | 0 | | 0 | |
| **Irudinei** | | | 0 | | 0 | | 0 | | 8 | | 46 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 1 |
| | *Batracobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Glossiphonia* | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Glossiphonidae n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Helobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Erpobdella* | 0 | | 0 | | 0 | | 0 | | 46 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | |
| | *Dina* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Erpobdellidae n.i. | 0 | | 0 | | 0 | | 6 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Placobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Piscicola* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Odonati** | | | 0 | | 1 | | 0 | | 26 | | 28 | | 0 | | 0 | | 16 | | 4 | | 0 | | 5 | | 1 |
| | *Anax* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Aeschna* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Calopterigidae | *Calopteryx* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4 | | 3 | | 0 | | 3 | | 0 | |
| | Coenagrionidae | 0 | | 1 | | 0 | | 23 | | 21 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | |
| | *Coenagrion* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Gomphidae | *Ophiogomphus* | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Stylurus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | | 0 | | 0 | | 0 | |
| | *Gomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ischnura* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ladona* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Onychogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 1 | |
| | *Platycnemis* | 0 | | 0 | | 0 | | 3 | | 5 | | 0 | | 0 | | 7 | | 0 | | 0 | | 2 | | 0 | |
| | *Somatochlora* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Anisottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Zigottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricladi** | | | 0 | | 280 | | 0 | | 789 | | 232 | | 38 | | 0 | | 23 | | 0 | | 0 | | 3 | | 0 |
| | *Dugesia* | 0 | | 280 | | 0 | | 789 | | 232 | | 38 | | 0 | | 23 | | 0 | | 0 | | 3 | | 0 | |
| | *Planaria* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dendrocoelum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Nematodi** | | 0 | | 6 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Idracaro** | | 0 | | 22 | | 0 | | 3 | | 0 | | 0 | | 22 | | 12 | | 1 | | 0 | | 0 | | 7 | |
| **Lepidotteri** | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | |
| **Altro/note** | microcrostacei | no | | no | | no | | no | | no | | no | | no | | no | | no | | no | | no | | no | |
| **TOTALE Individui** | | 178 | | 931 | | 162 | | 1586 | | 1516 | | 209 | | 595 | | 1617 | | 434 | | 225 | | 4870 | | 909 | |

Tab. III - Elenco faunistico del campionamento autunnale (n° 10/11): tratti guadabili.

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti Guadabili - SURBER - Multi habitat proporzionale**
**IdroEcoregione (HER): 6 Pianura Padana: 0,5 m^**
**IdroEcoregione (HER): 2 Prealpi: 1 $m^2$ (staz 3 e 8)**

**AUTUNNO 2011**

| ELENCO TAXA | | 3 | | 8 | | 18 | | 24 | | 26 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT |
| **Plecotteri** | | | 0 | | 0 | | 0 | | 0 | | 0 |
| | *Leuctra* | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Efemerotteri** | | | 53 | | 25 | | 127 | | 43 | | 137 |
| | Baetidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Baetis* | 37 | | 18 | | 0 | | 25 | | 0 | |
| | *Caenis* | 16 | | 7 | | 127 | | 18 | | 117 | |
| | *Ecdyonurus* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ephemera* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Serratella* | 0 | | 0 | | 0 | | 0 | | 19 | |
| | *Heptagenia* | 0 | | 0 | | 0 | | 0 | | 1 | |
| | Heptageniidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Pseudocentroptilum* | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricotteri** | | | 478 | | 568 | | 9 | | 238 | | 290 |
| | Ecnomidae | 5 | | 0 | | 2 | | 0 | | 0 | |
| | Goeridae | 0 | | 0 | | 0 | | 0 | | 2 | |
| | Hydropsychidae | 223 | | 227 | | 2 | | 0 | | 162 | |
| | Hydroptilidae | 2 | | 0 | | 0 | | 3 | | 0 | |
| | Lepidostomatidae | 0 | | 0 | | 0 | | 10 | | 28 | |
| | Leptoceridae | 18 | | 8 | | 1 | | 59 | | 7 | |
| | Polycentropodidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Psychomyidae | 227 | | 333 | | 4 | | 165 | | 91 | |
| | Rhyacophilidae | 3 | | 0 | | 0 | | 1 | | 0 | |
| | Tricotteri n.i. | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Coleotteri** | | | 34 | | 3 | | 1 | | 7 | | 12 |
| | Elmidae | 34 | | 3 | | 1 | | 7 | | 12 | |
| | *Stenelmis* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Dryopidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Eterotteri** | | | 0 | | 1 | | 0 | | 3 | | 6 |
| | *Micronecta* | 0 | | 0 | | 1 | | 0 | | 0 | |
| | *Aphelocheirus* | 0 | | 1 | | 0 | | 3 | | 6 | |
| **Cnidari** | | | 17 | | 3 | | 0 | | 0 | | 0 |
| | *Hydra* | 17 | | 3 | | 0 | | 0 | | 0 | |
| **Ditteri** | | | 254 | | 103 | | 80 | | 21 | | 109 |
| | Athericidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Chironomidae | 186 | | 92 | | 76 | | 0 | | 80 | |
| | Empididae | 57 | | 10 | | 0 | | 0 | | 3 | |
| | Limoniidae | 1 | | 1 | | 1 | | 8 | | 1 | |
| | Psychodidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Simuliidae | 10 | | 0 | | 0 | | 12 | | 24 | |
| | Tabanidae | 0 | | 0 | | 0 | | 1 | | 0 | |
| | Tipulidae | 0 | | 0 | | 3 | | 0 | | 1 | |
| **Gasteropodi** | | | 5 | | 4 | | 22 | | 104 | | 74 |
| | *Ancylus* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Acroloxus* | 2 | | 0 | | 3 | | 1 | | 0 | |
| | *Bithynia* | 1 | | 1 | | 4 | | 20 | | 3 | |
| | *Gyraulus* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Hydrobioidea | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Lymnaea* | 1 | | 1 | | 1 | | 0 | | 1 | |
| | *Physa* | 0 | | 0 | | 7 | | 6 | | 1 | |
| | Planorbidae | 1 | | 0 | | 7 | | 8 | | 1 | |
| | *Theodoxus* | 0 | | 0 | | 0 | | 10 | | 1 | |
| | *Valvata* | 0 | | 2 | | 0 | | 59 | | 67 | |
| **Bivalvi** | | | 97 | | 1 | | 2 | | 26 | | 24 |
| | *Corbicula* | 0 | | 0 | | 0 | | 19 | | 17 | |
| | *Dreissena* | 97 | | 1 | | 0 | | 7 | | 1 | |
| | *Pisidium* | 0 | | 0 | | 2 | | 0 | | 6 | |
| **Crostacei** | | | 22 | | 0 | | 3 | | 2 | | 2 |
| | Asellidae | 18 | | 0 | | 2 | | 0 | | 2 | |
| | Gammaridae | 4 | | 0 | | 1 | | 2 | | 0 | |
| **Oligocheti** | | | 35 | | 3 | | 6 | | 13 | | 0 |
| | Naididae | 35 | | 3 | | 6 | | 10 | | 0 | |
| | Lumbricidae | 0 | | 0 | | 0 | | 3 | | 0 | |
| **Irudinei** | | | 0 | | 0 | | 1 | | 16 | | 0 |
| | *Dina* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Erpobdella* | 0 | | 0 | | 1 | | 15 | | 0 | |
| | *Glossiphonia* | 0 | | 0 | | 0 | | 1 | | 0 | |
| | Glossiphoniidae | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Odonati** | | | 0 | | 0 | | 9 | | 1 | | 0 |
| | *Calopteryx* | 0 | | 0 | | 0 | | 1 | | 0 | |
| Coenagrionidae | Coenagrionidae | 0 | | 0 | | 9 | | 0 | | 0 | |
| | *Onychogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Zigotteri n.i. | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricladi** | | | 19 | | 5 | | 1 | | 3 | | 3 |
| | *Dugesia* | 19 | | 5 | | 1 | | 3 | | 3 | |
| | *Planaria* | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dendrocoelum* | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Idracaro** | | | | | | | | | | | |
| **Nematodi** | | | | | | | | | | | |
| **Altro/note** | microcrostacei | | | | | | | | | | |
| **TOTALE Individui** | | 1014 | | 716 | | 262 | | 477 | | 657 | |

Tab. IV - Elenco faunistico del campionamento autunnale (n° 10/11): tratti non guadabili.

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti NON Guadabili** **AUTUNNO 2011**
**Metodo Substrati Artificiale ( S.A. di faesite)**
**Unità di Campionamento: 5 S.A. (0,5 m²)**
**IdroEcoregione (HER): 6 Pianura Padana**

| ELENCO TAXA | 1A | | 1 B | | 6A | | 6 B | | 7A | | 7 B | | 15 A | | 15 B | | 36A | | 36B | | 44A | | 44B | | 59 A | | 59 B | | 63 A | | 63 B | | 68 A | | 68 B | | 77 A | | 77 B | | 80A | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT |
| **Plecotteri** | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| *Leuctra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Brachyptera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Efemerotteri** | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 304 | | 150 | | 93 | | 138 | | 258 | | 96 | | 92 | | 49 | | 25 | | 123 | | 14 | | 88 | | 242 |
| *Baetis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 66 | 33 | 33 | 18 | 18 | 10 | 10 | 129 | 129 | 73 | 73 | 39 | 39 | 27 | 27 | 6 | 6 | 60 | 60 | 3 | 3 | 22 | 22 | 160 | 160 |
| *Centroptilum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Caenis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 22 | 25 | 25 | 30 | 30 | 20 | 20 | 85 | 85 | 12 | 12 | 10 | 10 | 7 | 7 | 1 | 1 | 3 | 3 | 6 | 6 | 27 | 27 | 7 | 7 |
| *Ecdyonurus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 20 | 20 | 33 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| *Ephemera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Serratella* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 | 214 | 85 | 85 | 10 | 10 | 28 | 28 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Heptagenia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 15 | 15 | 38 | 38 | 41 | 41 | 9 | 9 | 43 | 43 | 14 | 14 | 18 | 18 | 60 | 60 | 5 | 5 | 39 | 39 | 72 | 72 |
| Heptageniidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Potamanthus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Paraleptophlebia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Tricotteri** | | 14 | | 13 | | 0 | | 1 | | 4 | | 9 | | 12 | | 2 | | 75 | | 152 | | 39 | | 124 | | 120 | | 33 | | 108 | | 30 | | 86 | | 88 | | 17 | | 106 | | 210 |
| Hydropsychidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 54 | 54 | 101 | 101 | 31 | 31 | 109 | 109 | 120 | 120 | 32 | 32 | 105 | 105 | 27 | 27 | 59 | 59 | 83 | 83 | 16 | 16 | 103 | 103 | 209 | 209 |
| Ecnomidae | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Lepidostomatidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 6 | 6 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptoceridae | 7 | 5 | 0 | 1 | 3 | 4 | 0 | 0 | 1 | 22 | 4 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 |
| Limnephilidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glossosomatidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Psychomyidae | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rhyacophilidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydroptilidae | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 12 | 12 | 23 | 23 | 3 | 3 | 2 | 2 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | 27 | 27 | 4 | 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Phryganeidae | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tricotteri n.i. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Eterotteri** | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 |
| *Aphelocheirus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Micronecta* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Coleotteri** | | 0 | | 0 | | 0 | | 0 | | 1 | | 2 | | 0 | | 0 | | 2 | | 3 | | 3 | | 1 | | 1 | | 2 | | 0 | | 0 | | 1 | | 1 | | 2 | | 0 | | 6 |
| Dryopidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Haliplidae | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dytiscidae | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elmidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 4 | 4 |
| Gyrinidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Cnidari** | | 0 | | 0 | | 0 | | 1 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| *Hydra* | 0 | | 0 | | 0 | 1 | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| **Ditteri** | | 45 | | 36 | | 10 | | 56 | | 85 | | 89 | | 27 | | 16 | | 1160 | | 336 | | 64 | | 74 | | 320 | | 159 | | 252 | | 267 | | 248 | | 309 | | 61 | | 276 | | 435 |
| Dolichopodidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomidae | 43 | 36 | 10 | 55 | 85 | 87 | 27 | 16 | 1156 | 329 | 64 | 72 | 307 | 138 | 233 | 209 | 247 | 263 | 57 | 262 | 211 | | | | | | | | | | | | | | | | | | | | | |
| Ceratopogonidae | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | |
| Empididae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | |
| Limoniidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Psychodidae | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Tabanidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Tipulidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Sciomyzidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Simuliidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 11 | 19 | 18 | 56 | 1 | 46 | 1 | 10 | 221 | | | | | | | | | | | | | | | | | | | | | |
| **Gasteropodi** | | 21 | | 43 | | 17 | | 40 | | 125 | | 72 | | 12 | | 12 | | 2 | | 3 | | 0 | | 4 | | 8 | | 11 | | 0 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 |
| Ancylidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Ancylus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Acroloxus* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Bithynia* | 5 | 7 | 0 | 0 | 4 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| Planorbidae | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Lymnaea* | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Physa* | 8 | 30 | 16 | 39 | 111 | 61 | 12 | 7 | 2 | 3 | 0 | 2 | 7 | 11 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Theodoxus* | 8 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Viviparus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| *Valvata* | 0 | 2 | 0 | 0 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti NON Guadabili** **AUTUNNO 2011**
**Metodo Substrati Artificiale ( S.A. di faesite)**
**Unità di Campionamento: 5 S.A. (0,5 m$^2$)**
**IdroEcoregione (HER): 6 Pianura Padana**

| ELENCO TAXA | | 1A | | 1 B | | 6A | | 6 B | | 7A | | 7 B | | 15 A | | 15 B | | 36A | | 36B | | 44A | | 44B | | 59 A | | 59 B | | 63 A | | 63 B | | 68 A | | 68 B | | 77 A | | 77 B | | 80A | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT | N° ind. | TOT |
| **Bivalvi** | | | 1 | | 1 | | 0 | | 1 | | 4 | | 1 | | 3 | | 5 | | 0 | | 1 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 |
| | *Corbicula* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | |
| | *Dreissena* | 1 | | 1 | | 0 | | 1 | | 2 | | 1 | | 3 | | 5 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Pisidium* | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Sphaerium* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Unionidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Crostacei** | | | 24 | | 11 | | 5 | | 8 | | 7 | | 11 | | 7 | | 15 | | 66 | | 68 | | 259 | | 320 | | 215 | | 93 | | 141 | | 33 | | 1429 | | 1041 | | 149 | | 1181 | | 218 |
| | Asellidae | 15 | | 5 | | 1 | | 3 | | 3 | | 2 | | 1 | | 9 | | 0 | | 1 | | 0 | | 0 | | 4 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Cambaridae | 0 | | 0 | | 4 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | |
| | Gammaridae | 9 | | 6 | | 0 | | 5 | | 4 | | 9 | | 6 | | 5 | | 66 | | 67 | | 259 | | 320 | | 210 | | 91 | | 141 | | 33 | | 1428 | | 1041 | | 148 | | 1181 | | 218 | |
| | Niphargidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Palaemonetes* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | |
| **Oligocheti** | | | 730 | | 842 | | 8 | | 8 | | 975 | | 761 | | 1322 | | 1316 | | 708 | | 370 | | 69 | | 250 | | 439 | | 160 | | 298 | | 296 | | 287 | | 215 | | 118 | | 333 | | 229 |
| | Naididae | 730 | | 842 | | 8 | | 8 | | 975 | | 761 | | 1322 | | 1312 | | 708 | | 370 | | 69 | | 249 | | 438 | | 159 | | 298 | | 296 | | 287 | | 215 | | 86 | | 326 | | 228 | |
| | Enchytraeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbricidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbriculidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | |
| | Tubificidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 32 | | 7 | | 0 | |
| **Irudinei** | | | 2 | | 9 | | 2 | | 0 | | 12 | | 5 | | 5 | | 6 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Glossiphonia* | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Helobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Glossiphoniidae | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Erpobdella* | 2 | | 9 | | 2 | | 0 | | 11 | | 4 | | 4 | | 6 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dina* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Piscicola* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Odonati** | | | 1 | | 0 | | 0 | | 0 | | 9 | | 38 | | 0 | | 8 | | 5 | | 5 | | 2 | | 28 | | 10 | | 6 | | 6 | | 2 | | 7 | | 3 | | 1 | | 27 | | 0 |
| | *Anax* | 0 | | 0 | | 0 | | 0 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Aeschna* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Calopterigidae | *Calopteryx* | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 5 | | 5 | | 2 | | 27 | | 9 | | 5 | | 6 | | 1 | | 7 | | 3 | | 1 | | 22 | | 0 | |
| | Coenagrionidae | 1 | | 0 | | 0 | | 0 | | 6 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Coenagrion* | 0 | | 0 | | 0 | | 0 | | 0 | | 31 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Gomphidae | Gomphidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | |
| | *Ophiogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Stylurus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Gomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ischnura* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ladona* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Onychogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Platycnemis* | 0 | | 0 | | 0 | | 0 | | 2 | | 4 | | 0 | | 5 | | 0 | | 0 | | 0 | | 0 | | 1 | | 1 | | 0 | | 1 | | 0 | | 0 | | 0 | | 3 | | 0 | |
| | *Somatochlora* | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Zigottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricladi** | | | 18 | | 2 | | 0 | | 0 | | 31 | | 159 | | 1 | | 1 | | 0 | | 2 | | 1 | | 0 | | 1 | | 3 | | 0 | | 0 | | 1 | | 0 | | 4 | | 0 | | 0 | |
| | *Dugesia* | 18 | | 2 | | 0 | | 0 | | 31 | | 159 | | 1 | | 1 | | 0 | | 2 | | 1 | | 0 | | 1 | | 3 | | 0 | | 0 | | 1 | | 0 | | 4 | | 0 | | 0 | |
| | *Planaria* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dendrocoelum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Nematodi** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Idracaro** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Lepidotteri** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Altro/note** | microcrostacei | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **TOTALE Individui** | | 856 | | 957 | | 42 | | 115 | | 1256 | | 1147 | | 1389 | | 1381 | | 2322 | | 1090 | | 530 | | 941 | | 1372 | | 563 | | 897 | | 679 | | 2085 | | 1780 | | 366 | | 2011 | | 1342 | |

Tab. V - Elenco faunistico del campionamento invernale (n° 11/12): tratti non guadabili.

**PROGETTO DMV FIUME OGLIO**
**CAMPIONAMENTI BIOLOGICI: ANALISI MACROINVERTEBRATI**
**Tratti NON Guadabili**
**Metodo Substrati Artificiale ( S.A. di faesite)**
**Unità di Campionamento: 5 S.A. (0,5 m$^2$)**
**IdroEcoregione (HER): 6 Pianura Padana**

**INVERNO 2012**

| ELENCO TAXA | | 1B | | 6B | | 7A | | 15A | | 36B | | 44B | | 53B | | 59A | | 63A | | 68A | | 77B | | 80B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT |
| **Plecotteri** | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| | *Leuctra* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Brachyptera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Efemerotteri** | | | 2 | | 2 | | 0 | | 0 | | 203 | | 357 | | 11 | | 486 | | 71 | | 259 | | 14 | | 968 |
| | *Baetis* | 2 | | 0 | | 0 | | 0 | | 4 | | 16 | | 1 | | 297 | | 4 | | 145 | | 4 | | 660 | |
| | *Centroptilum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Caenis* | 0 | | 2 | | 0 | | 0 | | 6 | | 30 | | 5 | | 30 | | 12 | | 5 | | 4 | | 72 | |
| | *Ecdyonurus* | 0 | | 0 | | 0 | | 0 | | 71 | | 206 | | 1 | | 3 | | 2 | | 0 | | 2 | | 12 | |
| | *Ephemera* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Serratella* | 0 | | 0 | | 0 | | 0 | | 122 | | 78 | | 0 | | 20 | | 6 | | 6 | | 0 | | 15 | |
| | *Heptagenia* | 0 | | 0 | | 0 | | 0 | | 0 | | 24 | | 4 | | 136 | | 47 | | 103 | | 4 | | 209 | |
| | Heptageniidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Potamanthus* | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Paraleptophlebia* | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricotteri** | | | 20 | | 6 | | 2 | | 0 | | 185 | | 167 | | 30 | | 405 | | 83 | | 106 | | 17 | | 533 |
| | Hydropsychidae | 0 | | 0 | | 0 | | 0 | | 65 | | 109 | | 8 | | 374 | | 45 | | 78 | | 7 | | 518 | |
| | Ecnomidae | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lepidostomatidae | 0 | | 0 | | 0 | | 0 | | 23 | | 9 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Leptoceridae | 10 | | 0 | | 2 | | 0 | | 82 | | 32 | | 1 | | 2 | | 3 | | 0 | | 6 | | 2 | |
| | Limnephilidae | 0 | | 5 | | 0 | | 0 | | 3 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Glossosomatidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Polycentropodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Psychomyidae | 1 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Rhyacophilidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Hydroptilidae | 7 | | 0 | | 0 | | 0 | | 8 | | 15 | | 21 | | 29 | | 35 | | 28 | | 4 | | 13 | |
| | Phryganeidae | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Goeridae | 0 | | 0 | | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tricotteri n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Eterotteri** | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 |
| | *Aphelocheirus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Corixidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | |
| **Coleotteri** | | | 1 | | 0 | | 0 | | 0 | | 3 | | 24 | | 1 | | 3 | | 1 | | 0 | | 2 | | 14 |
| | Dryopidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | |
| | Haliplidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Dytiscidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Elmidae | 1 | | 0 | | 0 | | 0 | | 2 | | 23 | | 0 | | 1 | | 1 | | 0 | | 0 | | 14 | |
| | Gyrinidae | 0 | | 0 | | 0 | | 0 | | 1 | | 1 | | 1 | | 2 | | 0 | | 0 | | 0 | | 0 | |
| **Cnidari** | | | 119 | | 10 | | 27 | | 18 | | 1 | | 0 | | 5 | | 7 | | 2 | | 0 | | 1 | | 0 |
| | *Hydra* | 119 | | 10 | | 27 | | 18 | | 1 | | 0 | | 5 | | 7 | | 2 | | 0 | | 1 | | 0 | |
| **Ditteri** | | | 46 | | 45 | | 6 | | 19 | | 85 | | 137 | | 40 | | 992 | | 357 | | 158 | | 83 | | 911 |
| | Dolichopodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Chironomidae | 46 | | 45 | | 6 | | 19 | | 83 | | 137 | | 40 | | 967 | | 355 | | 158 | | 83 | | 905 | |
| | Ceratopogonidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | |
| | Empididae | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 1 | |
| | Limoniidae | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | |
| | Psychodidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tabanidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Tipulidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Sciomyzidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Simuliidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 23 | | 0 | | 0 | | 0 | | 5 | |
| **Gasteropodi** | | | 69 | | 50 | | 11 | | 1 | | 4 | | 7 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 |
| | Ancylidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ancylus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Acroloxus* | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Bithynia* | 46 | | 0 | | 6 | | 1 | | 2 | | 5 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Planorbidae | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Lymnaea* | 8 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Physa* | 8 | | 49 | | 0 | | 0 | | 1 | | 1 | | 0 | | 0 | | 2 | | 0 | | 0 | | 0 | |
| | *Theodoxus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Viviparus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Valvata* | 7 | | 0 | | 5 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |

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**Unità di Campionamento: 5 S.A. (0,5 m$^2$)**
**IdroEcoregione (HER): 6 Pianura Padana**

| ELENCO TAXA | | 1B | | 6B | | 7A | | 15A | | 36B | | 44B | | 53B | | 59A | | 63A | | 68A | | 77B | | 80B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT | Nº Ind. | TOT |
| **Bivalvi** | | | 0 | | 0 | | 1 | | 0 | | 5 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 |
| | *Corbicula* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | |
| | *Dreissena* | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Pisidium* | 0 | | 0 | | 0 | | 0 | | 5 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Sphaerium* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Unionidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Crostacei** | | | 134 | | 14 | | 2 | | 28 | | 903 | | 696 | | 126 | | 148 | | 309 | | 1803 | | 571 | | 115 |
| | Asellidae | 102 | | 3 | | 0 | | 2 | | 87 | | 5 | | 0 | | 8 | | 0 | | 0 | | 4 | | 0 | |
| | Cambaridae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Gammaridae | 32 | | 11 | | 2 | | 26 | | 816 | | 691 | | 126 | | 140 | | 309 | | 1803 | | 567 | | 115 | |
| | Niphargidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Palaemonetes* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Oligocheti** | | | 321 | | 2 | | 51 | | 980 | | 94 | | 221 | | 79 | | 117 | | 340 | | 8 | | 106 | | 74 |
| | Naididae | 321 | | 2 | | 48 | | 980 | | 93 | | 215 | | 79 | | 117 | | 339 | | 8 | | 105 | | 74 | |
| | Enchytraeidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbricidae | 0 | | 0 | | 0 | | 0 | | 1 | | 6 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Lumbriculidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | |
| | Tubificidae | 0 | | 0 | | 3 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | |
| **Irudinei** | | | 3 | | 0 | | 2 | | 0 | | 4 | | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 |
| | *Glossiphonia* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Helobdella* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Glossiphoniidae | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | |
| | *Erpobdella* | 1 | | 0 | | 2 | | 0 | | 4 | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Dina* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Piscicola* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Odonati** | | | 18 | | 20 | | 1 | | 0 | | 5 | | 15 | | 2 | | 2 | | 5 | | 1 | | 11 | | 2 |
| | *Anax* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Aeschna* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Calopterigidae | *Calopteryx* | 0 | | 0 | | 1 | | 0 | | 2 | | 9 | | 2 | | 1 | | 4 | | 1 | | 4 | | 2 | |
| | Coenagrionidae | 18 | | 20 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Coenagrion* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Gomphidae | Gomphidae | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | |
| | *Ophiogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 4 | | 0 | | 0 | | 1 | | 0 | | 0 | | 0 | |
| | *Stylurus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Gomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ischnura* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Ladona* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Onychogomphus* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | *Platycnemis* | 0 | | 0 | | 0 | | 0 | | 3 | | 2 | | 0 | | 1 | | 0 | | 0 | | 3 | | 0 | |
| | *Somatochlora* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | Zigottero n.i. | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Tricladi** | | | 33 | | 0 | | 1 | | 1 | | 5 | | 17 | | 1 | | 0 | | 3 | | 0 | | 1 | | 0 |
| | *Dugesia* | 33 | | 0 | | 1 | | 1 | | 5 | | 17 | | 1 | | 0 | | 3 | | 0 | | 0 | | 0 | |
| | *Planaria* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 0 | |
| | *Dendrocoelum* | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Nematodi** | | 1 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| **Idracaro** | | 0 | | 0 | | 0 | | 0 | | 5 | | 1 | | 0 | | 0 | | 1 | | 1 | | 0 | | 0 | |
| **Lepidotteri** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Altro/note** | microcrostacei | | | | | | | | | | | | | | | | | | | | | | | | |
| **TOTALE Individui** | | 767 | | 149 | | 104 | | 1047 | | 1502 | | 1646 | | 295 | | 2160 | | 1174 | | 2336 | | 808 | | 2618 | |

## DIATOMEE –ELENCO DEI TAXA

Tab. VI - Elenco dei taxa delle diatomee rinvenute durante il campionamento autunnale (n° 10/11).

| | | stazioni | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 8 | 24 | 26 | 44 | 53 | 59 | 63 | 80 |
| TAXA | | nov-11 | nov-11 | nov-11 | nov-11 | nov-11 | nov-11 | nov-11 | nov-11 | nov-11 |
| Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | ADEU | 10 | 2 | 2 | 2 | 5 | 0 | 2 | 0 | 0 |
| Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot abnorma | AETG | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Achnanthidium minutissimum (Kütz.) Czarnecki abnormal form | ADMT | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |
| Achnanthidium minutissimum (Kützing) Czarnecki | ADMI | 35 | 6 | 4 | 9 | 49 | 12 | 31 | 16 | 34 |
| Achnanthidium pyrenaicum (Hustedt) Kobayasi | ADPY | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| Achnanthidium saprophilum (Kobayasi et Mayama) Round & Bukhtiyar | ADSA | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | ADSB | 19 | 3 | 3 | 9 | 61 | 7 | 11 | 2 | 14 |
| Amphora montana Krasske | AMMO | 2 | 9 | 0 | 0 | 0 | 0 | 3 | 0 | 5 |
| Amphora ovalis (Kützing) Kützing var.ovalis | AOVA | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Amphora pediculus (Kützing) Grunow | APED | 107 | 59 | 48 | 47 | 90 | 35 | 38 | 24 | 39 |
| Asterionella formosa Hassall | AFOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Brachysira vitrea (Grunow) Ross in Hartley | BVIT | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caloneis bacillum (Grunow) Cleve | CBAC | 0 | 0 | 8 | 3 | 4 | 5 | 4 | 4 | 2 |
| Cocconeis euglypta Ehrenberg | CEUG | 21 | 6 | 15 | 6 | 14 | 25 | 23 | 10 | 28 |
| Cocconeis lineata Ehrenberg | CLNT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Cocconeis pediculus Ehrenberg | CPED | 5 | 2 | 8 | 1 | 0 | 5 | 3 | 0 | 7 |
| Cocconeis placentula Ehrenberg abnormal form | CPTG | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 |
| Cocconeis pseudolineata (Geitler) Lange-Bertalot | COPL | 2 | 4 | 6 | 3 | 0 | 0 | 0 | 0 | 0 |
| Cyclotella atomus Hustedt | CATO | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 2 | 5 |
| Cyclotella comensis Grunow in Van Heurck | CCMS | 3 | 5 | 2 | 2 | 0 | 10 | 4 | 3 | 6 |
| Cyclotella costei Druart & Straub | CCOS | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyclotella meneghiniana Kützing | CMEN | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Cyclotella ocellata Pantocsek | COCE | 4 | 11 | 4 | 9 | 0 | 0 | 1 | 2 | 0 |
| Cymbella excisa Kützing var. excisa | CAEX | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 2 |
| Cymbella hustedtii Krasske var.hustedtii | CHUS | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Cymbella tumida (Brebisson)Van Heurck | CTUM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Denticula tenuis Kützing | DTEN | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Diadesmis contenta (Grunow ex V. Heurck) Mann | DCOT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Diatoma ehrenbergii Kützing | DEHR | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 7 |
| Diatoma vulgaris Bory | DVUL | 3 | 1 | 14 | 30 | 2 | 22 | 12 | 0 | 12 |
| Diatoma vulgaris Bory abnormal form | DVUT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Discostella pseudostelligera (Hustedt) Houk et Klee | DPST | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| Encyonema caespitosum Kützing abnormal form | ECTT | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encyonema caespitosum Kützing var.caespitosum | ECAE | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Encyonema lange-bertalotii Krammer morphotype 1 | ENLB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Encyonema minutum (Hilse in Rabh.) D.G. Mann in Round Crawford & | ENMI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Encyonema prostratum (Berkeley) Kützing | EPRO | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann | ESLE | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 5 |
| Encyonema species abnormal form | ENCT | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Encyonema ventricosum (Kützing) Grunow in Schmidt & al. | ENVE | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 1 |
| Encyonopsis minuta Krammer & Reichardt | ECPM | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Encyonopsis subminuta Krammer & Reichardt | ESUM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eolimna comperei Ector Coste et Iserentant in Coste & Ector | EOCO | 37 | 14 | 4 | 7 | 10 | 13 | 10 | 0 | 0 |
| Eolimna comperei Ector. Coste et Iserentant abnormal form (terat | ECAB | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| Eolimna minima(Grunow) Lange-Bertalot | EOMI | 14 | 19 | 2 | 0 | 55 | 15 | 26 | 9 | 8 |
| Eolimna minima(Grunow) Lange-Bertalot abnormal form | EOMT | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | ESBM | 0 | 3 | 4 | 3 | 1 | 0 | 1 | 9 | 4 |
| Fallacia mitis (Hustedt) D.G.Mann | FMIT | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fallacia subhamulata (Grunow in V. Heurck) D.G. Mann | FSBH | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fistulifera saprophila (Lange-Bertalot & Bonik) Lange-Bertalot | FSAP | 0 | 14 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Fragilaria capucina var.vaucheriae(Kütz.)Lange-Bertalot abnormal | FCVT | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Fragilaria crotonensis Kitton | FCRO | 4 | 10 | 13 | 7 | 0 | 1 | 1 | 0 | 2 |
| Fragilaria rumpens (Kütz.) G.W.F.Carlson | FRUM | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 0 |
| Fragilaria vaucheriae (Kützing) Petersen | FVAU | 0 | 3 | 0 | 0 | 0 | 0 | 10 | 0 | 2 |
| Frustulia vulgaris (Thwaites) De Toni | FVUL | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Geissleria decussis(Ostrup) Lange-Bertalot & Metzeltin | GDEC | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| GOMPHONEMA C.G. Ehrenberg | GOMP | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 |
| Gomphonema micropus Kützing var. micropus | GMIC | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphonema minutum(Ag.)Agardh f. minutum | GMIN | 0 | 6 | 40 | 70 | 23 | 20 | 17 | 7 | 14 |
| Gomphonema olivaceum (Hornemann) Brébisson var. olivaceum | GOLI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum | GPAR | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 6 |
| Gomphonema pumilum var. elegans Reichardt & Lange-Bertalot | GPEL | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gyrosigma kuetzingii (Grunow) Cleve | GYKU | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| Gyrosigma obtusatum (Sullivan & Wormley) Boyer | GYOB | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Hantzschia abundans Lange-Bertalot | HABU | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Karayevia clevei (Grunow) Bukhtiyarova var.clevei | KCLE | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Luticola goeppertiana (Bleisch in Rabenhorst)D.G. Mann in Round | LGOE | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 19 | 0 |
| Mayamaea permitis (Hustedt) Bruder & Medlin | MPMI | 4 | 6 | 0 | 0 | 20 | 3 | 0 | 4 | 4 |
| Melosira varians Agardh | MVAR | 0 | 0 | 2 | 3 | 0 | 1 | 0 | 3 | 2 |
| Navicula amphiceropsis Lange-Bertalot & Rumrich | NAAM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 |
| Navicula antonii Lange-Bertalot | NANT | 7 | 12 | 13 | 3 | 0 | 2 | 12 | 28 | 10 |
| Navicula capitatoradiata Germain | NCPR | 3 | 0 | 4 | 18 | 0 | 6 | 5 | 2 | 9 |
| Navicula caterva Hohn & Hellerman | NCTV | 1 | 21 | 5 | 3 | 0 | 1 | 0 | 2 | 2 |
| Navicula cryptocephala Kützing | NCRY | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Navicula cryptotenella Lange-Bertalot | NCTE | 9 | 10 | 15 | 2 | 3 | 17 | 5 | 28 | 8 |
| Navicula cryptotenelloides Lange-Bertalot | NCTO | 7 | 11 | 9 | 2 | 8 | 0 | 4 | 8 | 3 |
| Navicula germainii Wallace | NGER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| Navicula gregaria Donkin | NGRE | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 31 | 2 |
| Navicula jakovljevicii Hustedt | NJAK | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Navicula lanceolata (Agardh) Ehrenberg | NLAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 |
| Navicula oligotraphenta Lange-Bertalot & Hofmann | NOLI | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Navicula reichardtiana Lange-Bertalot var. reichardtiana | NRCH | 0 | 2 | 4 | 9 | 4 | 7 | 2 | 6 | 3 |
| Navicula rostellata Kützing | NROS | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Navicula tripunctata (O.F.Müller) Bory | NTPT | 2 | 5 | 16 | 11 | 4 | 28 | 9 | 9 | 7 |
| Navicula veneta Kützing | NVEN | 1 | 1 | 0 | 0 | 0 | 3 | 4 | 0 | 0 |
| Navicula veneta Kützing abnormal fo. | NVTG | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| NITZSCHIA A.H. Hassall | NITZ | 0 | 1 | 0 | 7 | 6 | 1 | 1 | 0 | 0 |
| Nitzschia acicularis(Kützing) W.M.Smith | NACI | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Nitzschia amphibia Grunow f. amphibia | NAMP | 0 | 0 | 1 | 0 | 3 | 8 | 2 | 0 | 2 |
| Nitzschia archibaldii Lange-Bertalot | NIAR | 0 | 2 | 2 | 4 | 0 | 1 | 0 | 2 | 1 |
| Nitzschia desertorum Hustedt | NDES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Nitzschia dissipata(Kützing)Grunow ssp.dissipata | NDIS | 29 | 65 | 77 | 78 | 20 | 40 | 22 | 106 | 17 |
| Nitzschia fonticola Grunow in Cleve et Möller | NFON | 18 | 6 | 35 | 32 | 17 | 36 | 57 | 31 | 38 |
| Nitzschia fonticola Grunow in Cleve et Möller abnormal fo. | NFOT | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nitzschia heufleriana Grunow | NHEU | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 4 | 0 |
| Nitzschia inconspicua Grunow | NINC | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 |
| Nitzschia lacuum Lange-Bertalot | NILA | 3 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
| Nitzschia linearis(Agardh) W.M.Smith var.linearis | NLIN | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 8 |
| Nitzschia linearis(Agardh) W.M.Smith var.linearis abnormal form | NLIA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Nitzschia palea (Kützing) W.Smith abnormal fo. | NPTR | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nitzschia palea (Kützing) W.Smith var. palea | NPAL | 3 | 1 | 0 | 0 | 0 | 3 | 9 | 3 | 12 |
| Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in | NPAD | 4 | 4 | 4 | 2 | 2 | 1 | 7 | 5 | 2 |
| Nitzschia recta Hantzsch in Rabenhorst | NREC | 0 | 0 | 0 | 0 | 3 | 5 | 6 | 1 | 1 |
| Nitzschia sigmoidea (Nitzsch)W. Smith | NSIG | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Nitzschia sociabilis Hustedt | NSOC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Nitzschia species abnormal form | NIZT | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 |
| Nitzschia sublinearis Hustedt | NSBL | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Planothidium frequentissimum(Lange-Bertalot)Lange-Bertalot | PLFR | 0 | 0 | 4 | 0 | 0 | 2 | 0 | 2 | 4 |
| Planothidium lanceolatum(Brebisson ex Kützing) Lange-Bertalot | PTLA | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Planothidium rostratum (Oestrup) Lange-Bertalot | PRST | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 |
| Pseudostaurosira brevistriata (Grun.in Van Heurck) Williams & Ro | PSBR | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| Reimeria sinuata (Gregory) Kociolek & Stoermer | RSIN | 0 | 2 | 0 | 0 | 7 | 4 | 3 | 6 | 2 |
| Reimeria uniseriata Sala Guerrero & Ferrario | RUNI | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | RABB | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 2 |
| Sellaphora pupula (Kützing) Mereschkowsky | SPUP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Sellaphora seminulum (Grunow) D.G. Mann | SSEM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Simonsenia delognei Lange-Bertalot | SIDE | 1 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Staurosira construens (Ehr.) var. binodis (Ehr.) Hamilton | SCBI | 0 | 8 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| Staurosira construens Ehrenberg | SCON | 10 | 10 | 3 | 14 | 3 | 6 | 0 | 9 | 9 |
| Staurosira construens Ehrenberg abnormal form | SCTG | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Staurosira venter (Ehr.) Cleve & Moeller | SSVE | 0 | 6 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Staurosirella pinnata (Ehr.) Williams & Round | SPIN | 5 | 8 | 4 | 6 | 0 | 3 | 2 | 0 | 4 |
| Surirella angusta Kützing | SANG | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 1 |
| Surirella brebissonii var.kuetzingii Krammer et Lange-Bertalot | SBKU | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 29 | 7 |
| TABELLARIA C.G. Ehrenberg | TABE | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tryblionella apiculata Gregory | TAPI | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Tryblionella calida (Grunow in Cl. & Grun.) D.G. Mann in Round C | TCAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Ulnaria biceps (Kützing) Compère | UBIC | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 |
| Ulnaria ulna (Nitzsch.) Compère | UULN | 0 | 1 | 2 | 5 | 0 | 3 | 2 | 0 | 1 |
| Ulnaria ulna (Nitzsch.) Compère abnormal form | UULT | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| TOTALE | | 405 | 415 | 413 | 429 | 433 | 407 | 410 | 452 | 406 |

# DIATOMEE –INDICI DIATOMICI E INDICE DI DIVERSITA' DI SHANNON

Campagna autunnale (n°10/2011)

## SITO: 7

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **249** |
| SITE NAME | 7 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Hydrologic code | 7 |
| Particularities DMV Parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 13.0 | 12.5 | 16.1 | 14.6 | 11.3 | 14.7 | 12.2 | 15.0 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/S |
| 80.3 | 15.1 | 10.7 | 12.4 | 12.4 | 12.8 | 12.9 | 7.9 | 3.77 |

**QUALITY NOTES / 20**

| | | |
|---|---|---|
| Number of species 45 | Diversity 4.22 | Genera number 20 |
| Population 405 | Evenness 0.77 | |

| Number | o/oo | Code | ou | Designation | * | taxon IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 107 | 264.20 | APED | - | Amphora pediculus (Kützing) Grunow | * | | 4 | 1 |
| 37 | 91.36 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | | 1.5 | 1 |
| 35 | 86.42 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | | 5 | 1 |
| 29 | 71.60 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | | 4 | 3 |
| 21 | 51.85 | CEUG | - | Cocconeis euglypta Ehrenberg | * | | 3.6 | 1 |
| 19 | 46.91 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 2 |
| 18 | 44.44 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | | 3.5 | 1 |
| 14 | 34.57 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | | 2.2 | 1 |
| 10 | 24.69 | SCON | - | Staurosira construens Ehrenberg | * | | 4 | 1 |
| 10 | 24.69 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 1 |
| 9 | 22.22 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | | 4 | 1 |
| 7 | 17.28 | NANT | - | Navicula antonii Lange-Bertalot | * | | 4 | 1 |
| 7 | 17.28 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | | 3.5 | 1 |
| 6 | 14.81 | GPEL | GELG | Gomphonema pumilum var. elegans Reichardt & Lange-Bertalot | * | | 5 | 1 |
| 5 | 12.35 | CPED | - | Cocconeis pediculus Ehrenberg | * | | 4 | 2 |
| 5 | 12.35 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | | 4 | 1 |
| 5 | 12.35 | ECPM | - | Encyonopsis minuta Krammer & Reichardt | * | | 4 | 2 |
| 4 | 9.88 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | | 2.3 | 1 |
| 4 | 9.88 | COCE | - | Cyclotella ocellata Pantocsek | * | | 3 | 1 |
| 4 | 9.88 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | | 3 | 1 |
| 4 | 9.88 | FCRO | - | Fragilaria crotonensis Kitton | * | | 4 | 1 |
| 3 | 7.41 | NCPR | - | Navicula capitatoradiata Germain | * | | 3 | 2 |
| 3 | 7.41 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | | 1 | 3 |
| 3 | 7.41 | NILA | - | Nitzschia lacuum Lange-Bertalot | * | | 5 | 2 |
| 3 | 7.41 | CMEN | - | Cyclotella meneghiniana Kützing | * | | 2 | 1 |
| 3 | 7.41 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | | 4 | 3 |
| 3 | 7.41 | DVUL | - | Diatoma vulgaris Bory | * | | 4 | 1 |
| 3 | 7.41 | FSBH | - | Fallacia subhamulata (Grunow in V. Heurck) D.G.Mann | * | | 4 | 1 |
| 2 | 4.94 | TAPI | TBCO | Tryblionella apiculata Gregory | * | | 2.4 | 2 |
| 2 | 4.94 | COPL | - | Cocconeis pseudolineata (Geitler) Lange-Bertalot | * | | 5 | 1 |
| 2 | 4.94 | CHUS | CBHD | Cymbella hustedtii Krasske var.hustedtii | * | | 5 | 2 |
| 2 | 4.94 | AMMO | HLMO | Amphora montana Krasske | * | | 2.8 | 1 |
| 2 | 4.94 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | | 4.4 | 2 |
| 2 | 4.94 | SSEM | - | Sellaphora seminulum (Grunow) D.G. Mann | * | | 1.5 | 2 |
| 2 | 4.94 | NCRY | - | Navicula cryptocephala Kützing | * | | 3.5 | 2 |
| 1 | 2.47 | SIDE | - | Simonsenia delognei Lange-Bertalot | * | | 3 | 2 |
| 1 | 2.47 | ADSA | - | Achnanthidium saprophilum (Kobayasi et Mayama) Round & Bukhtiyarova | * | | 3 | 1 |
| 1 | 2.47 | CPTG | - | Cocconeis placentula Ehrenberg abnormal form | * | | 1 | 3 |
| 1 | 2.47 | NCTV | - | Navicula caterva Hohn & Hellerman | * | | 3 | 1 |
| 1 | 2.47 | EOMT | - | Eolimna minima(Grunow) Lange-Bertalot abnormal form | * | | 1 | 3 |
| 1 | 2.47 | NAAM | - | Navicula amphiceropsis Lange-Bertalot & Rumrich | * | | 3 | 3 |
| Omnidia 5.3 | | | | | | | | 2 |
| 1 | 2.47 | FRUM | - | Fragilaria rumpens (Kütz.) G.W.F.Carlson | * | | 4 | 1 |
| 1 | 2.47 | NFOT | - | Nitzschia fonticola Grunow in Cleve et Möller abnormal fo. | * | | 1 | 3 |
| 1 | 2.47 | NROS | - | Navicula rostellata Kützing | * | | 3 | 3 |
| 1 | 2.47 | NVEN | - | Navicula veneta Kützing | * | | 1 | 2 |

**IDSE/S 3.77**

degradation low

organic pollution non-existent

anthropogenic eutrophication non-existent

SITO: 8

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **250** |
| SITE NAME | 8 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities DMV Parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 13.1 | 12.1 | 18.4 | 14.2 | 11.8 | 13.4 | 12.2 | 12.4 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/S |
| 85.7 | 13.8 | 10.6 | 10.8 | 12.4 | 6.8 | 12.9 | 8.0 | 3.59 |

**QUALITY NOTES / 20**

| | | | |
|---|---|---|---|
| Number of species | 59 | Diversity | 4.90 |
| Population | 415 | Evenness | 0.83 |

Genera number 25

| Number | o/oo | Code | ou | Designation | * | taxon IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 65 | 156.63 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | 4 | 3 | |
| 59 | 142.17 | APED | - | Amphora pediculus (Kützing) Grunow | * | 4 | 1 | |
| 21 | 50.60 | NCTV | - | Navicula caterva Hohn & Hellerman | * | 3 | 1 | |
| 19 | 45.78 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | 2.2 | 1 | |
| 15 | 36.14 | SIDE | - | Simonsenia delognei Lange-Bertalot | * | 3 | 2 | |
| 14 | 33.73 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | 1.5 | 1 | |
| 14 | 33.73 | FSAP | - | Fistulifera saprophila (Lange-Bertalot & Bonik) Lange-Bertalot | * | 2 | 1 | |
| 12 | 28.92 | NANT | - | Navicula antonii Lange-Bertalot | * | 4 | 1 | |
| 11 | 26.51 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | 3.5 | 1 | |
| 11 | 26.51 | COCE | - | Cyclotella ocellata Pantocsek | * | 3 | 1 | |
| 10 | 24.10 | FCRO | - | Fragilaria crotonensis Kitton | * | 4 | 1 | |
| 10 | 24.10 | SCON | - | Staurosira construens Ehrenberg | * | 4 | 1 | |
| 10 | 24.10 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | 4 | 1 | |
| 9 | 21.69 | AMMO | HLMO | Amphora montana Krasske | * | 2.8 | 1 | |
| 8 | 19.28 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | 4 | 1 | |
| 8 | 19.28 | SCBI | SBND | Staurosira construens (Ehr.) var. binodis (Ehr.) Hamilton | * | 4 | 1 | |
| 6 | 14.46 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | 2.3 | 1 | |
| 6 | 14.46 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | 4 | 1 | |
| 6 | 14.46 | NFON | - | Nitzschia fonticola Grunow in Cleve et Moller | * | 3.5 | 1 | |
| 6 | 14.46 | SSVE | - | Staurosira venter (Ehr.) Cleve & Moeller | * | 4 | 1 | |
| 6 | 14.46 | CEUG | - | Cocconeis euglypta Ehrenberg | * | 3.6 | 1 | |
| 6 | 14.46 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | 5 | 1 | |
| 5 | 12.05 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | 4 | 3 | |
| 5 | 12.05 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | 4.4 | 2 | |
| 4 | 9.64 | COPL | - | Cocconeis pseudolineata (Geitler) Lange-Bertalot | * | 5 | 1 | |
| 4 | 9.64 | ECAE | - | Encyonema caespitosum Kützing var.caespitosum | * | 4 | 2 | |
| 4 | 9.64 | NILA | - | Nitzschia lacuum Lange-Bertalot | * | 5 | 2 | |
| 4 | 9.64 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | 3 | 1 | |
| 3 | 7.23 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | 3 | 2 | |
| 3 | 7.23 | FVAU | FCVA | Fragilaria vaucheriae (Kützing) Petersen | * | 3.4 | 1 | |
| 3 | 7.23 | PSBR | SBRV | Pseudostaurosira brevistriata (Grun.in Van Heurck) Williams & Round | * | 3 | 1 | |
| 3 | 7.23 | ADSA | - | Achnanthidium saprophilum (Kobayasi et Mayama) Round & Bukhtiyarova | * | 3 | 1 | |
| 3 | 7.23 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | 2 | 1 | |
| 2 | 4.82 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | 3.8 | 2 | |
| 2 | 4.82 | CPED | - | Cocconeis pediculus Ehrenberg | * | 4 | 2 | |
| 2 | 4.82 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | 4.8 | 1 | |
| 2 | 4.82 | NPTR | - | Nitzschia palea (Kützing) W.Smith abnormal fo. | * | 1 | 3 | |
| 2 | 4.82 | BVIT | - | Brachysira vitrea (Grunow) Ross in Hartley | * | 5 | 2 | |
| 2 | 4.82 | FMIT | FLEN | Fallacia mitis (Hustedt) D.G.Mann | * | 5 | 1 | |
| 2 | 4.82 | FSBH | - | Fallacia subhamulata (Grunow in V. Heurck) D.G. Mann | * | 4 | 1 | |
| 2 | 4.82 | EOMT | - | Eolimna minima(Grunow) Lange-Bertalot abnormal form | * | 1 | 3 | |
| 2 | 4.82 | ESUM | - | Encyonopsis subminuta Krammer & Reichardt | * | 5 | 1 | |

Omnidia 5.3 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 4.82 | FRUM | - | Fragilaria rumpens (Kütz.) G.W.F.Carlson | * | 4 | 1 | |
| 2 | 4.82 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | 3 | 1 | |
| 2 | 4.82 | ECTT | - | Encyonema caespitosum Kützing abnormal form | * | 1 | 3 | |
| 2 | 4.82 | DEHR | - | Diatoma ehrenbergii Kützing | * | 4 | 3 | |
| 2 | 4.82 | NCRY | - | Navicula cryptocephala Kützing | * | 3.5 | 2 | |
| 2 | 4.82 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | 3.6 | 1 | |
| 2 | 4.82 | SCTG | - | Staurosira construens Ehrenberg abnormal form | * | 1 | 3 | |
| 1 | 2.41 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | 3 | 1 | |
| 1 | 2.41 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | 1 | 3 | |
| 1 | 2.41 | TABE | - | TABELLARIA C.G. Ehrenberg | | 5 | 2 | |
| 1 | 2.41 | NHEU | - | Nitzschia heufleriana Grunow | * | 4 | 1 | |
| 1 | 2.41 | NITZ | - | NITZSCHIA A.H. Hassall | | 1 | 2.3 | |
| 1 | 2.41 | NROS | - | Navicula rostellata Kützing | * | 3 | 3 | |
| 1 | 2.41 | NVEN | - | Navicula veneta Kützing | * | 1 | 2 | |
| 1 | 2.41 | DVUL | - | Diatoma vulgaris Bory | * | 4 | 1 | |
| 1 | 2.41 | GYOB | - | Gyrosigma obtusatum (Sullivan & Wormley) Boyer | * | 2.8 | 3 | |
| 1 | 2.41 | GYKU | - | Gyrosigma kuetzingii (Grunow) Cleve | | 4 | 3 | |

**IDSE/S 3.59**

degradation low

organic pollution non-existent

anthropogenic eutrophication non-existent

SITO: 24

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **251** |
| SITE NAME | 24 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities | DMV parma autunno 2011 |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 14.6 | 12.4 | 18.3 | 14.5 | 11.7 | 14.7 | 13.8 | 15.0 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/5 |
| 82.9 | 15.1 | 12.2 | 12.9 | 12.6 | 7.6 | 13.2 | 8.0 | 3.75 |

**QUALITY NOTES / 20**

| | | | | | |
|---|---|---|---|---|---|
| Number of species | 43 | Diversity | 4.43 | Genera number | 20 |
| Population | 413 | Evenness | 0.82 | | |

| Number | o/oo | Code | ou | Designation | * : taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 77 | 186.44 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | 4 | | 3 |
| 48 | 116.22 | APED | - | Amphora pediculus (Kützing) Grunow | * | 4 | | 1 |
| 40 | 96.85 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | 4 | | 1 |
| 35 | 84.75 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | 3.5 | | 1 |
| 16 | 38.74 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | 4.4 | | 2 |
| 15 | 36.32 | CEUG | - | Cocconeis euglypta Ehrenberg | * | 3.6 | | 1 |
| 15 | 36.32 | SSVE | - | Staurosira venter (Ehr.) Cleve & Moeller | * | 4 | | 1 |
| 15 | 36.32 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | 4 | | 1 |
| 14 | 33.90 | DVUL | - | Diatoma vulgaris Bory | * | 4 | | 1 |
| 13 | 31.48 | FCRO | - | Fragilaria crotonensis Kitton | * | 4 | | 1 |
| 13 | 31.48 | NANT | - | Navicula antonii Lange-Bertalot | * | 4 | | 1 |
| 9 | 21.79 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | 3.5 | | 1 |
| 8 | 19.37 | CPED | - | Cocconeis pediculus Ehrenberg | * | 4 | | 2 |
| 8 | 19.37 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | 4 | | 2 |
| 6 | 14.53 | CCOS | - | Cyclotella costei Druart & Straub | * | 5 | | 1 |
| 6 | 14.53 | COPL | - | Cocconeis pseudolineata (Geitler) Lange-Bertalot | * | 5 | | 1 |
| 5 | 12.11 | NCTV | - | Navicula caterva Hohn & Hellerman | * | 3 | | 1 |
| 4 | 9.69 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | 3.6 | | 1 |
| 4 | 9.69 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | 5 | | 1 |
| 4 | 9.69 | NCPR | - | Navicula capitatoradiata Germain | * | 3 | | 2 |
| 4 | 9.69 | COCE | - | Cyclotella ocellata Pantocsek | * | 3 | | 1 |
| 4 | 9.69 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | 4 | | 1 |
| 4 | 9.69 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | 1.5 | | 1 |
| 4 | 9.69 | PLFR | - | Planothidium frequentissimum(Lange-Bertalot)Lange-Bertalot | * | 3.4 | | 1 |
| 4 | 9.69 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | 2 | | 1 |
| 4 | 9.69 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | 3 | | 1 |
| 3 | 7.26 | NILA | - | Nitzschia lacuum Lange-Bertalot | * | 5 | | 2 |
| 3 | 7.26 | SCON | - | Staurosira construens Ehrenberg | * | 4 | | 1 |
| 3 | 7.26 | NJAK | - | Navicula jakovljevicii Hustedt | | 4 | | 2 |
| 3 | 7.26 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | 3 | | 2 |
| 2 | 4.84 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | 3 | | 1 |
| 2 | 4.84 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | 3 | | 1 |
| 2 | 4.84 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | 3.8 | | 2 |
| 2 | 4.84 | MVAR | - | Melosira varians Agardh | * | 4 | | 1 |
| 2 | 4.84 | GMIC | - | Gomphonema micropus Kützing var. micropus | * | 3 | | 1 |
| 2 | 4.84 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | 2.2 | | 1 |
| 2 | 4.84 | ECTT | - | Encyonema caespitosum Kützing abnormal form | * | 1 | | 3 |
| 2 | 4.84 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | 4 | | 3 |
| 2 | 4.84 | CPTG | - | Cocconeis placentula Ehrenberg abnormal form | * | 1 | | 3 |
| 1 | 2.42 | NAMP | - | Nitzschia amphibia Grunow f.amphibia | * | 2 | | 2 |
| 1 | 2.42 | NGRE | - | Navicula gregaria Donkin | * | 3.4 | | 1 |
| 1 | 2.42 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | 4 | | 1 |

Omnidia 5.3 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.42 | DTEN | - | Denticula tenuis Kützing | * | 5 | | 3 |

**IDSE/5 3.75**

degradation low

organic pollution non-existent

anthropogenic eutrophication non-existent

# SITO: 26

Omnidia 5.3 1

**SLIDE NUMBER** **252**
SITE NAME 26
RIVER OGLIO
DATE 01/10/2011
Particularities dmv parma autunno 2011

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 14.0 | 12.5 | 18.6 | 14.4 | 12.0 | 14.1 | 13.4 | 15.4 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/5 |
| 82.2 | 15.2 | 12.7 | 12.6 | 13.0 | 7.9 | 13.1 | 7.8 | 3.70 |

**QUALITY NOTES / 20**

| | | |
|---|---|---|
| Number of species 42 | Diversity 4.21 | Genera number 20 |
| Population 429 | Evenness 0.78 | |

| Number | o/oo | Code | ou | Designation | * : taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 78 | 181.82 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | 4 | 3 | |
| 70 | 163.17 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | 4 | 1 | |
| 47 | 109.56 | APED | - | Amphora pediculus (Kützing) Grunow | * | 4 | 1 | |
| 32 | 74.59 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | 3.5 | 1 | |
| 30 | 69.93 | DVUL | - | Diatoma vulgaris Bory | * | 4 | 1 | |
| 18 | 41.96 | NCPR | - | Navicula capitatoradiata Germain | * | 3 | 2 | |
| 14 | 32.63 | SCON | - | Staurosira construens Ehrenberg | * | 4 | 1 | |
| 11 | 25.64 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | 4.4 | 2 | |
| 9 | 20.98 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | 3 | 2 | |
| 9 | 20.98 | COCE | - | Cyclotella ocellata Pantocsek | * | 3 | 1 | |
| 9 | 20.98 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | 3.6 | 1 | |
| 9 | 20.98 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | 5 | 1 | |
| 7 | 16.32 | FCRO | - | Fragilaria crotonensis Kitton | * | 4 | 1 | |
| 7 | 16.32 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | 1.5 | 1 | |
| 7 | 16.32 | NITZ | - | NITZSCHIA A.H. Hassall | | 1 | 2.3 | |
| 6 | 13.99 | CEUG | - | Cocconeis euglypta Ehrenberg | * | 3.6 | 1 | |
| 6 | 13.99 | SCBI | SBND | Staurosira construens (Ehr.) var. binodis (Ehr.) Hamilton | * | 4 | 1 | |
| 6 | 13.99 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | 4 | 1 | |
| 5 | 11.66 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | 3 | 1 | |
| 4 | 9.32 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | 3.8 | 2 | |
| 3 | 6.99 | NCTV | - | Navicula caterva Hohn & Hellerman | * | 3 | 1 | |
| 3 | 6.99 | NANT | - | Navicula antonii Lange-Bertalot | * | 4 | 1 | |
| 3 | 6.99 | MVAR | - | Melosira varians Agardh | * | 4 | 1 | |
| 3 | 6.99 | COPL | - | Cocconeis pseudolineata (Geitler) Lange-Bertalot | * | 5 | 1 | |
| 3 | 6.99 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | 4 | 2 | |
| 3 | 6.99 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | 2 | 1 | |
| 2 | 4.66 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | 3 | 1 | |
| 2 | 4.66 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | 4 | 1 | |
| 2 | 4.66 | CAEX | - | Cymbella excisa Kützing var. excisa | * | 4 | 2 | |
| 2 | 4.66 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | 4 | 3 | |
| 2 | 4.66 | CHUS | CBHD | Cymbella hustedtii Krasske var.hustedtii | * | 5 | 2 | |
| 2 | 4.66 | EPRO | - | Encyonema prostratum (Berkeley) Kützing | * | 4 | 3 | |
| 2 | 4.66 | GOMP | - | GOMPHONEMA C.G. Ehrenberg | | 3.6 | 1.9 | |
| 2 | 4.66 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | 3 | 1 | |
| 2 | 4.66 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | 3.5 | 1 | |
| 2 | 4.66 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | 4 | 1 | |
| 2 | 4.66 | NVTG | - | Navicula veneta Kützing abnormal fo. | * | 1 | 3 | |
| 1 | 2.33 | CPED | - | Cocconeis pediculus Ehrenberg | * | 4 | 2 | |
| 1 | 2.33 | PSBR | SBRV | Pseudostaurosira brevistriata (Grun.in Van Heurck) Williams & Round | * | 3 | 1 | |
| 1 | 2.33 | NILA | - | Nitzschia lacuum Lange-Bertalot | * | 5 | 2 | |
| 1 | 2.33 | NCRY | - | Navicula cryptocephala Kützing | * | 3.5 | 2 | |
| 1 | 2.33 | NGRE | - | Navicula gregaria Donkin | * | 3.4 | 1 | |

Omnidia 5.3 2

**IDSE/5 3.70**
degradation low
organic pollution non-existent
anthropogenic eutrophication non-existent

-

SITO: 44

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **253** |
| SITE NAME | 44 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities | dmv parma autunno 2011 |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 12.1 | 11.8 | 18.1 | 14.0 | 11.8 | 13.4 | 11.6 | 13.3 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/5 |
| 78.3 | 14.7 | 10.2 | 10.6 | 12.8 | 10.4 | 12.2 | 7.4 | 3.67 |

**QUALITY NOTES / 20**

| | | | | | |
|---|---|---|---|---|---|
| Number of species | 38 | Diversity | 3.91 | Genera number | 18 |
| Population | 433 | Evenness | 0.75 | | |

| Number | o/oo | Code | ou | Designation | * : taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 90 | 207.85 | APED | - | Amphora pediculus (Kützing) Grunow | * | 4 | 1 | |
| 61 | 140.88 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | 3 | 2 | |
| 55 | 127.02 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | 2.2 | 1 | |
| 49 | 113.16 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | 5 | 1 | |
| 23 | 53.12 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | 4 | 1 | |
| 20 | 46.19 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | 2.3 | 1 | |
| 20 | 46.19 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | 4 | 3 | |
| 17 | 39.26 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | 3.5 | 1 | |
| 14 | 32.33 | CEUG | - | Cocconeis euglypta Ehrenberg | * | 3.6 | 1 | |
| 10 | 23.09 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | 1.5 | 1 | |
| 8 | 18.48 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | 3.5 | 1 | |
| 7 | 16.17 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | 4.8 | 1 | |
| 6 | 13.86 | NITZ | - | NITZSCHIA A.H. Hassall | | 1 | 2.3 | |
| 5 | 11.55 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | 3 | 1 | |
| 4 | 9.24 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | 3.6 | 1 | |
| 4 | 9.24 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | 4 | 2 | |
| 4 | 9.24 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | 4.4 | 2 | |
| 3 | 6.93 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | 4 | 1 | |
| 3 | 6.93 | SCON | - | Staurosira construens Ehrenberg | * | 4 | 1 | |
| 3 | 6.93 | NAMP | - | Nitzschia amphibia Grunow f.amphibia | * | 2 | 2 | |
| 3 | 6.93 | NREC | - | Nitzschia recta Hantzsch in Rabenhorst | * | 3 | 2 | |
| 2 | 4.62 | NIZT | - | Nitzschia species abnormal form | * | 1 | 3 | |
| 2 | 4.62 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | 4 | 1 | |
| 2 | 4.62 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | 3 | 1 | |
| 2 | 4.62 | DVUL | - | Diatoma vulgaris Bory | * | 4 | 1 | |
| 2 | 4.62 | ENVE | - | Encyonema ventricosum (Kützing) Grunow in Schmidt & al. | * | 4.8 | 1 | |
| 2 | 4.62 | EOMT | - | Eolimna minima(Grunow) Lange-Bertalot abnormal form | * | 1 | 3 | |
| 2 | 4.62 | UULT | - | Ulnaria ulna (Nitzsch.) Compère abnormal form | * | 1 | 3 | |
| 1 | 2.31 | CPTG | - | Cocconeis placentula Ehrenberg abnormal form | * | 1 | 3 | |
| 1 | 2.31 | DPST | - | Discostella pseudostelligera (Hustedt) Houk et Klee | * | 4 | 1 | |
| 1 | 2.31 | ESLE | - | Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann | * | 5 | 2 | |
| 1 | 2.31 | NSBL | - | Nitzschia sublinearis Hustedt | * | 5 | 2 | |
| 1 | 2.31 | NGRE | - | Navicula gregaria Donkin | * | 3.4 | 1 | |
| 1 | 2.31 | NSIO | - | Nitzschia sigmoidea (Nitzsch)W. Smith | * | 3 | 2 | |
| 1 | 2.31 | NINC | - | Nitzschia inconspicua Grunow | * | 2.8 | 1 | |
| 1 | 2.31 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | 2 | 1 | |
| 1 | 2.31 | FSAP | - | Fistulifera saprophila (Lange-Bertalot & Bonik) Lange-Bertalot | * | 2 | 1 | |
| 1 | 2.31 | ECAB | - | Eolimna comperei Ector. Coste et Iserentant abnormal form (teratogen) | * | 1 | 3 | |

Omnidia 5.3 2

**IDSE/5 3.67**

degradation low

organic pollution non-existent

anthropogenic eutrophication low

SITO: 53

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **254** |
| SITE NAME | 53 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities dmv parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 13.0 | 12.4 | 17.5 | 13.4 | 11.3 | 13.7 | 12.7 | 14.5 | |
| TDI | IBD | DI-CH | ER-O | IDP | LOBO | SID | TID | IDSE/S |
| 79.6 | 14.2 | 11.1 | 11.7 | 12.6 | 10.3 | 13.0 | 6.8 | 3.69 |

**QUALITY NOTES / 20**

| | | | |
|---|---|---|---|
| Number of species | 59 | Diversity | 4.96 |
| Population | 407 | Evenness | 0.84 |
| Genera number 27 | | | |

| Number | o/oo | Code | ou | Designation | * | taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|---|
| 40 | 98.28 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | | | 4 | 3 |
| 36 | 88.45 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | | | 3.6 | 1 |
| 35 | 86.00 | APED | - | Amphora pediculus (Kützing) Grunow | * | | | 4 | 1 |
| 28 | 68.80 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | | | 4.4 | 2 |
| 25 | 61.43 | CEUG | - | Cocconeis euglypta Ehrenberg | * | | | 3.6 | 1 |
| 22 | 54.05 | DVUL | - | Diatoma vulgaris Bory | * | | | 4 | 1 |
| 20 | 49.14 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | | | 4 | 1 |
| 17 | 41.77 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | | | 4 | 1 |
| 15 | 36.86 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | | | 2.2 | 1 |
| 13 | 31.94 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | | | 1.5 | 1 |
| 12 | 29.48 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | | | 5 | 1 |
| 10 | 24.57 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | | | 4 | 3 |
| 8 | 19.66 | NAMP | - | Nitzschia amphibia Grunow f.amphibia | * | | | 2 | 2 |
| 7 | 17.20 | CATO | - | Cyclotella atomus Hustedt | * | | | 2 | 1 |
| 7 | 17.20 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | | | 3 | 2 |
| 7 | 17.20 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | | | 3.6 | 1 |
| 6 | 14.74 | NCPR | - | Navicula capitatoradiata Germain | * | | | 3 | 2 |
| 6 | 14.74 | ESLE | - | Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann | * | | | 5 | 2 |
| 6 | 14.74 | SCON | - | Staurosira construens Ehrenberg | * | | | 4 | 1 |
| 5 | 12.29 | NREC | - | Nitzschia recta Hantzsch in Rabenhorst | * | | | 3 | 2 |
| 5 | 12.29 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | | | 4 | 2 |
| 5 | 12.29 | CPED | - | Cocconeis pediculus Ehrenberg | * | | | 4 | 2 |
| 4 | 9.83 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | | | 4.8 | 1 |
| 4 | 9.83 | PRST | - | Planothidium rostratum (Oestrup) Lange-Bertalot | * | | | 4.4 | 1 |
| 4 | 9.83 | NLIN | - | Nitzschia linearis(Agardh) W.M.Smith var.linearis | * | | | 3 | 2 |
| 3 | 7.37 | NVEN | - | Navicula veneta Kützing | * | | | 1 | 2 |
| 3 | 7.37 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | | | 4 | 1 |
| 3 | 7.37 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | | | 2.3 | 1 |
| 3 | 7.37 | GPAR | - | Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum | * | | | 2 | 1 |
| 3 | 7.37 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | | | 3 | 1 |
| 3 | 7.37 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | | | 1 | 3 |
| 2 | 4.91 | EC4B | - | Eolimna comperei Ector, Coste et Iserentant abnormal form (teratogen) | * | | | 1 | 3 |
| 2 | 4.91 | ENVE | - | Encyonema ventricosum (Kützing) Grunow in Schmidt & al. | * | | | 4.8 | 1 |
| 2 | 4.91 | PLFR | - | Planothidium frequentissimum(Lange-Bertalot)Lange-Bertalot | * | | | 3.4 | 1 |
| 2 | 4.91 | PTLA | - | Planothidium lanceolatum(Brebisson ex Kützing) Lange-Bertalot | * | | | 4.6 | 1 |
| 2 | 4.91 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | | | 4 | 1 |
| 2 | 4.91 | ENCT | - | Encyonema species abnormal form | * | | | 1 | 3 |
| 2 | 4.91 | AETG | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot abnormal form | * | | | 1 | 3 |
| 2 | 4.91 | GYKU | - | Gyrosigma kuetzingii (Grunow) Cleve | | | | 4 | 3 |
| 2 | 4.91 | SBKU | - | Surirella brebissonii var.kuetzingii Krammer et Lange-Bertalot | * | | | 3 | 2 |
| 2 | 4.91 | NANT | - | Navicula antonii Lange-Bertalot | * | | | 4 | 1 |
| 2 | 4.91 | FRUM | - | Fragilaria rumpens (Kütz.) G.W.F.Carlson | * | | | 4 | 1 |

Omnidia 5.3 2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 4.91 | NGRE | - | Navicula gregaria Donkin | * | | | 3.4 | 1 |
| 2 | 4.91 | CTUM | - | Cymbella tumida (Brebisson)Van Heurck | * | | | 3 | 3 |
| 2 | 4.91 | NIZT | - | Nitzschia species abnormal form | * | | | 1 | 3 |
| 1 | 2.46 | EC4E | - | Encyonema caespitosum Kützing var.caespitosum | * | | | 4 | 2 |
| 1 | 2.46 | ADMT | - | Achnanthidium minutissimum (Kütz.) Czarnecki abnormal form | * | | | 1 | 3 |
| 1 | 2.46 | FCVT | - | Fragilaria capucina var.vaucheriae(Kütz.)Lange-Bertalot abnormal form | * | | | 1 | 3 |
| 1 | 2.46 | ADBI | ADPY | Achnanthidium biasolettianum (Grunow in Cl. & Grun.) Lange-Bertalot | * | | | 5 | 1 |
| 1 | 2.46 | KCLE | - | Karayevia clevei (Grunow) Bukhtiyarova var.clevei | * | | | 4 | 2 |
| 1 | 2.46 | FCRO | - | Fragilaria crotonensis Kitton | * | | | 4 | 1 |
| 1 | 2.46 | GDEC | - | Geissleria decussis(Ostrup) Lange-Bertalot & Metzeltin | * | | | 4.8 | 2 |
| 1 | 2.46 | MVAR | - | Melosira varians Agardh | * | | | 4 | 1 |
| 1 | 2.46 | NCTV | - | Navicula caterva Hohn & Hellerman | * | | | 3 | 1 |
| 1 | 2.46 | RUNI | - | Reimeria uniseriata Sala Guerrero & Ferrario | * | | | 4.5 | 1 |
| 1 | 2.46 | PSBR | SBRV | Pseudostaurosira brevistriata (Grun.in Van Heurck) Williams & Round | * | | | 3 | 1 |
| 1 | 2.46 | NITZ | - | NITZSCHIA A.H. Hassall | | | | 1 | 2.3 |
| 1 | 2.46 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | | | 3.8 | 2 |
| 1 | 2.46 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | | | 3 | 1 |

**IDSE/S 3.69**
degradation low
organic pollution low
anthropogenic eutrophication low

SITO: 59

Omnidia 5.3

| | |
|---|---|
| **SLIDE NUMBER** | **255** |
| SITE NAME | 59 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities dmv parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 12.3 | 12.1 | 16.1 | 12.9 | 9.9 | 12.8 | 12.4 | 14.0 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/S |
| 70.9 | 14.2 | 10.2 | 11.4 | 12.1 | 10.5 | 12.6 | 8.7 | 3.61 |

**QUALITY NOTES / 20**

| | | | |
|---|---|---|---|
| Number of species | 56 | Diversity | 4.91 |
| Population | 410 | Evenness | 0.85 |

Genera number 23

| Number | o/oo | Code | ou | Designation | * : taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 57 | 139.02 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | | 3.5 | 1 |
| 38 | 92.68 | APED | - | Amphora pediculus (Kützing) Grunow | * | | 4 | 1 |
| 31 | 75.61 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | | 5 | 1 |
| 26 | 63.41 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | | 2.2 | 1 |
| 23 | 56.10 | CEUG | - | Cocconeis euglypta Ehrenberg | * | | 3.6 | 1 |
| 22 | 53.66 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp dissipata | * | | 4 | 3 |
| 17 | 41.46 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | | 4 | 1 |
| 12 | 29.27 | NANT | - | Navicula antonii Lange-Bertalot | * | | 4 | 1 |
| 12 | 29.27 | DVUL | - | Diatoma vulgaris Bory | * | | 4 | 1 |
| 11 | 26.83 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 2 |
| 10 | 24.39 | FVAU | FCVA | Fragilaria vaucheriae (Kützing) Petersen | * | | 3.4 | 1 |
| 10 | 24.39 | EOCO | - | Eolimna comperei Ector Coste et Iserentant in Coste & Ector | * | | 1.5 | 1 |
| 9 | 21.95 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | | 4.4 | 2 |
| 9 | 21.95 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | | 1 | 3 |
| 7 | 17.07 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | | 3 | 1 |
| 7 | 17.07 | SANG | - | Surirella angusta Kützing | * | | 4 | 1 |
| 6 | 14.63 | NREC | - | Nitzschia recta Hantzsch in Rabenhorst | * | | 3 | 2 |
| 6 | 14.63 | NLIN | - | Nitzschia linearis(Agardh) W.M.Smith var.linearis | * | | 3 | 2 |
| 6 | 14.63 | NHEU | - | Nitzschia heufleriana Grunow | * | | 4 | 1 |
| 5 | 12.20 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | | 4 | 1 |
| 5 | 12.20 | NCPR | - | Navicula capitatoradiata Germain | * | | 3 | 2 |
| 4 | 9.76 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | | 4 | 2 |
| 4 | 9.76 | NVEN | - | Navicula veneta Kützing | * | | 1 | 2 |
| 4 | 9.76 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | | 3.5 | 1 |
| 4 | 9.76 | GPAR | - | Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum | * | | 2 | 1 |
| 4 | 9.76 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | | 4 | 3 |
| 3 | 7.32 | ESLE | - | Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann | * | | 5 | 2 |
| 3 | 7.32 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | | 4.6 | 1 |
| 3 | 7.32 | AMMO | HLMO | Amphora montana Krasske | * | | 2.8 | 1 |
| 3 | 7.32 | FVUL | - | Frustulia vulgaris (Thwaites) De Toni | * | | 4 | 3 |
| 3 | 7.32 | UBIC | - | Ulnaria biceps (Kützing) Compère | * | | 3 | 1 |
| 3 | 7.32 | CPED | - | Cocconeis pediculus Ehrenberg | * | | 4 | 2 |
| 3 | 7.32 | NGRE | - | Navicula gregaria Donkin | * | | 3.4 | 1 |
| 3 | 7.32 | SBKU | - | Surirella brebissonii var.kuetzingii Krammer et Lange-Bertalot | * | | 3 | 2 |
| 3 | 7.32 | CATO | - | Cyclotella atomus Hustedt | * | | 2 | 1 |
| 2 | 4.88 | NOLI | - | Navicula oligotraphenta Lange-Bertalot & Hofmann | * | | 4 | 3 |
| 2 | 4.88 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | | 4 | 1 |
| 2 | 4.88 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | | 4 | 1 |
| 2 | 4.88 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | | 3 | 1 |
| 2 | 4.88 | AOVA | - | Amphora ovalis (Kützing) Kützing var.ovalis | * | | 3 | 1 |
| 2 | 4.88 | ADEU | - | Achnanthidium eutrophilum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 1 |
| 2 | 4.88 | ADMT | - | Achnanthidium minutissimum (Kütz.) Czarnecki abnormal form | * | | 1 | 3 |

Omnidia 5.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 4.88 | NINC | - | Nitzschia inconspicua Grunow | * | | 2.8 | 1 |
| 2 | 4.88 | NAMP | - | Nitzschia amphibia Grunow f.amphibia | * | | 2 | 2 |
| 2 | 4.88 | NACI | - | Nitzschia acicularis(Kützing) W.M.Smith | * | | 2 | 2 |
| 2 | 4.88 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | | 3.6 | 1 |
| 2 | 4.88 | CAEX | - | Cymbella excisa Kützing var. excisa | * | | 4 | 2 |
| 2 | 4.88 | HABU | - | Hantzschia abundans Lange-Bertalot | * | | 1.2 | 2 |
| 1 | 2.44 | DEHR | - | Diatoma ehrenbergii Kützing | * | | 4 | 3 |
| 1 | 2.44 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | | 2 | 1 |
| 1 | 2.44 | COCE | - | Cyclotella ocellata Pantocsek | * | | 3 | 1 |
| 1 | 2.44 | NLIA | - | Nitzschia linearis(Agardh) W.M.Smith var.linearis abnormal form | * | | 1 | 3 |
| 1 | 2.44 | FCRO | - | Fragilaria crotonensis Kitton | * | | 4 | 1 |
| 1 | 2.44 | LGOE | - | Luticola goeppertiana (Bleisch in Rabenhorst)D.G. Mann in Round Crawford | * | | 2 | 2 |
| 1 | 2.44 | PRST | - | Planothidium rostratum (Oestrup) Lange-Bertalot | * | | 4.4 | 1 |
| 1 | 2.44 | NITZ | - | NITZSCHIA A.H. Hassall | | | 1 | 2.3 |

IDSE/S 3.61
degradation low
organic pollution low
anthropogenic eutrophication low

# SITO: 63

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **256** |
| SITE NAME | 63 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Hydrologic code | 63 |
| Particularities dmv parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 13.4 | 10.9 | 16.4 | 13.6 | 11.9 | 13.2 | 12.1 | 13.6 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/5 |
| 84.6 | 14.3 | 10.4 | 9.7 | 11.5 | 10.1 | 12.4 | 6.5 | 3.52 |

**QUALITY NOTES / 20**

| | | |
|---|---|---|
| Number of species 46 | Diversity 4.40 | Genera number 23 |
| Population 452 | Evenness 0.80 | |

| Number | o/oo | Code | ou | Designation | * : taxon | IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 106 | 234.51 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | | 4 | 3 |
| 31 | 68.58 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | | 3.5 | 1 |
| 31 | 68.58 | NGRE | - | Navicula gregaria Donkin | * | | 3.4 | 1 |
| 29 | 64.16 | SBKU | - | Surirella brebissonii var.kuetzingii Krammer et Lange-Bertalot | * | | 3 | 2 |
| 28 | 61.95 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | | 4 | 1 |
| 26 | 57.52 | NANT | - | Navicula antonii Lange-Bertalot | * | | 4 | 1 |
| 24 | 53.10 | APED | - | Amphora pediculus (Kützing) Grunow | * | | 4 | 1 |
| 19 | 42.04 | LGOE | - | Luticola goeppertiana (Bleisch in Rabenhorst)D.G. Mann in Round Crawford | * | | 2 | 2 |
| 16 | 35.40 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | | 5 | 1 |
| 10 | 22.12 | CEUG | - | Cocconeis euglypta Ehrenberg | * | | 3.6 | 1 |
| 9 | 19.91 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | | 4.4 | 2 |
| 9 | 19.91 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | | 2 | 1 |
| 9 | 19.91 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | | 2.2 | 1 |
| 9 | 19.91 | SCON | - | Staurosira construens Ehrenberg | * | | 4 | 1 |
| 8 | 17.70 | NLAN | - | Navicula lanceolata (Agardh) Ehrenberg | * | | 3.8 | 1 |
| 8 | 17.70 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | | 3.5 | 1 |
| 7 | 15.49 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | | 4 | 1 |
| 6 | 13.27 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | | 4.8 | 1 |
| 6 | 13.27 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | | 3.6 | 1 |
| 5 | 11.06 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | | 3 | 1 |
| 4 | 8.85 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | | 2.3 | 1 |
| 4 | 8.85 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | | 4 | 2 |
| 4 | 8.85 | NHEU | - | Nitzschia heufleriana Grunow | * | | 4 | 1 |
| 3 | 6.64 | NAAM | - | Navicula amphiceropsis Lange-Bertalot & Rumrich | * | | 3 | 3 |
| 3 | 6.64 | MVAR | - | Melosira varians Agardh | * | | 4 | 1 |
| 3 | 6.64 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | | 4 | 3 |
| 3 | 6.64 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | | 1 | 3 |
| 2 | 4.42 | PLFR | - | Planothidium frequentissimum(Lange-Bertalot)Lange-Bertalot | * | | 3.4 | 1 |
| 2 | 4.42 | NSOC | - | Nitzschia sociabilis Hustedt | * | | 3 | 3 |
| 2 | 4.42 | DVUT | - | Diatoma vulgaris Bory abnormal form | * | | 1 | 3 |
| 2 | 4.42 | SPUP | - | Sellaphora pupula (Kützing) Mereschkowksy | * | | 2.6 | 2 |
| 2 | 4.42 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 2 |
| 2 | 4.42 | CLNT | CPLI | Cocconeis lineata Ehrenberg | * | | 4 | 1 |
| 2 | 4.42 | CATO | - | Cyclotella atomus Hustedt | * | | 2 | 1 |
| 2 | 4.42 | COCE | - | Cyclotella ocellata Pantocsek | * | | 3 | 1 |
| 2 | 4.42 | FRUM | - | Fragilaria rumpens (Kütz.) G.W.F.Carlson | * | | 4 | 1 |
| 2 | 4.42 | NCPR | - | Navicula capitatoradiata Germain | * | | 3 | 2 |
| 2 | 4.42 | NCTV | - | Navicula caterva Hohn & Hellerman | * | | 3 | 1 |
| 2 | 4.42 | NGER | - | Navicula germainii Wallace | * | | 3 | 2 |
| 2 | 4.42 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | | 3.8 | 2 |
| 1 | 2.21 | GOMP | - | GOMPHONEMA C.G. Ehrenberg | | | 3.6 | 1.9 |

Omnidia 5.3 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.21 | UBIC | - | Ulnaria biceps (Kützing) Compère | * | | 3 | 1 |
| 1 | 2.21 | NREC | - | Nitzschia recta Hantzsch in Rabenhorst | * | | 3 | 2 |
| 1 | 2.21 | ENVE | - | Encyonema ventricosum (Kützing) Grunow in Schmidt & al. | * | | 4.8 | 1 |
| 1 | 2.21 | NDES | MPMI | Nitzschia desertorum Hustedt | * | | 1 | 2 |
| 1 | 2.21 | TAPI | TBCO | Tryblionella apiculata Gregory | * | | 2.4 | 2 |

**IDSE/5 3.52**

degradation low

organic pollution low

anthropogenic eutrophication low

-

SITO: 80

Omnidia 5.3 1

| | |
|---|---|
| **SLIDE NUMBER** | **257** |
| SITE NAME | 80 |
| RIVER | OGLIO |
| DATE | 01/10/2011 |
| Particularities dmv parma autunno 2011 | |

| IPS | SLA | DESCY | IDAP | GENRE | CEE | SHE | WAT | |
|---|---|---|---|---|---|---|---|---|
| 13.1 | 11.7 | 18.4 | 13.3 | 11.3 | 13.4 | 12.8 | 14.2 | |
| TDI | IBD | DI-CH | EPI-D | IDP | LOBO | SID | TID | IDSE/S |
| 69.5 | 15.1 | 10.8 | 12.2 | 11.6 | 12.8 | 13.2 | 7.4 | 3.61 |

**QUALITY NOTES / 20**

| | | | | |
|---|---|---|---|---|
| Number of species | 64 | Diversity | 5.20 | Genera number 31 |
| Population | 406 | Evenness | 0.87 | |

| Number | o/oo | Code | ou | Designation | * | taxon IBD | IPS S | IPS V |
|---|---|---|---|---|---|---|---|---|
| 39 | 96.06 | APED | - | Amphora pediculus (Kützing) Grunow | * | | 4 | 1 |
| 38 | 93.60 | NFON | - | Nitzschia fonticola Grunow in Cleve et Möller | * | | 3.5 | 1 |
| 34 | 83.74 | ADMI | - | Achnanthidium minutissimum (Kützing) Czarnecki | * | | 5 | 1 |
| 28 | 68.97 | CEUG | - | Cocconeis euglypta Ehrenberg | * | | 3.6 | 1 |
| 17 | 41.87 | NDIS | - | Nitzschia dissipata(Kützing)Grunow ssp.dissipata | * | | 4 | 3 |
| 14 | 34.48 | ADSB | - | Achnanthidium straubianum (Lange-Bertalot)Lange-Bertalot | * | | 3 | 2 |
| 14 | 34.48 | GMIN | - | Gomphonema minutum(Ag.)Agardh f. minutum | * | | 4 | 1 |
| 12 | 29.56 | NPAL | - | Nitzschia palea (Kützing) W.Smith var. palea | * | | 1 | 3 |
| 12 | 29.56 | DVUL | - | Diatoma vulgaris Bory | * | | 4 | 1 |
| 10 | 24.63 | NANT | - | Navicula antonii Lange-Bertalot | * | | 4 | 1 |
| 9 | 22.17 | SCON | - | Staurosira construens Ehrenberg | * | | 4 | 1 |
| 9 | 22.17 | NCPR | - | Navicula capitatoradiata Germain | * | | 3 | 2 |
| 8 | 19.70 | NLIN | - | Nitzschia linearis(Agardh) W.M.Smith var.linearis | * | | 3 | 2 |
| 8 | 19.70 | NCTE | - | Navicula cryptotenella Lange-Bertalot | * | | 4 | 1 |
| 8 | 19.70 | EOMI | - | Eolimna minima(Grunow) Lange-Bertalot | * | | 2.2 | 1 |
| 7 | 17.24 | CPED | - | Cocconeis pediculus Ehrenberg | * | | 4 | 2 |
| 7 | 17.24 | SBKU | - | Sunrella brebissonii var.kuetzingii Krammer et Lange-Bertalot | * | | 3 | 2 |
| 7 | 17.24 | DEHR | - | Diatoma ehrenbergii Kützing | * | | 4 | 3 |
| 7 | 17.24 | NTPT | - | Navicula tripunctata (O.F.Müller) Bory | * | | 4.4 | 2 |
| 6 | 14.78 | CCMS | - | Cyclotella comensis Grunow in Van Heurck | * | | 4 | 3 |
| 6 | 14.78 | GPAR | - | Gomphonema parvulum (Kützing) Kützing var. parvulum f. parvulum | * | | 2 | 1 |
| 6 | 14.78 | CMEN | - | Cyclotella meneghiniana Kützing | * | | 2 | 1 |
| 5 | 12.32 | AMMO | HLMO | Amphora montana Krasske | * | | 2.8 | 1 |
| 5 | 12.32 | CATO | - | Cyclotella atomus Hustedt | * | | 2 | 1 |
| 5 | 12.32 | ESLE | - | Encyonema silesiacum (Bleisch in Rabh.) D.G. Mann | * | | 5 | 2 |
| 5 | 12.32 | ADBI | ADPY | Achnanthidium biasolettianum (Grunow in Cl. & Grun.) Lange-Bertalot | * | | 5 | 1 |
| 4 | 9.85 | PSBR | SBRV | Pseudostaurosira brevistriata (Grun.in Van Heurck) Williams & Round | * | | 3 | 1 |
| 4 | 9.85 | PLFR | - | Planothidium frequentissimum(Lange-Bertalot)Lange-Bertalot | * | | 3.4 | 1 |
| 4 | 9.85 | MPMI | - | Mayamaea permitis (Hustedt) Bruder & Medlin | * | | 2.3 | 1 |
| 4 | 9.85 | SPIN | - | Staurosirella pinnata (Ehr.) Williams & Round | * | | 4 | 1 |
| 4 | 9.85 | ESBM | - | Eolimna subminuscula (Manguin) Moser Lange-Bertalot & Metzeltin | * | | 2 | 1 |
| 3 | 7.39 | NRCH | - | Navicula reichardtiana Lange-Bertalot var. reichardtiana | * | | 3.6 | 1 |
| 3 | 7.39 | ENMI | - | Encyonema minutum (Hilse in Rabh.) D.G. Mann in Round Crawford & Mann | * | | 4 | 2 |
| 3 | 7.39 | NCTO | - | Navicula cryptotenelloides Lange-Bertalot | * | | 3.5 | 1 |
| 2 | 4.93 | GYKU | - | Gyrosigma kuetzingii (Grunow) Cleve | | | 4 | 3 |
| 2 | 4.93 | RSIN | - | Reimeria sinuata (Gregory) Kociolek & Stoermer | * | | 4.8 | 1 |
| 2 | 4.93 | NPAD | - | Nitzschia palea (Kützing) W.Smith var.debilis(Kützing)Grunow in Cl. & Gru | * | | 3 | 1 |
| 2 | 4.93 | AFOR | - | Asterionella formosa Hassall | * | | 4 | 1 |
| 2 | 4.93 | RABB | - | Rhoicosphenia abbreviata (C.Agardh) Lange-Bertalot | * | | 4 | 1 |
| 2 | 4.93 | TCAL | - | Tryblionella calida (Grunow in Cl. & Grun.) D.G. Mann in Round Crawford & | * | | 2.3 | 2 |
| 2 | 4.93 | DPST | - | Discostella pseudostelligera (Hustedt) Houk et Klee | * | | 4 | 1 |
| 2 | 4.93 | GOLI | - | Gomphonema olivaceum (Hornemann) Brébisson var. olivaceum | * | | 4.6 | 1 |

Omnidia 5.3 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 4.93 | CBAC | - | Caloneis bacillum (Grunow) Cleve | * | | 4 | 2 |
| 2 | 4.93 | FVAU | FCVA | Fragilaria vaucheriae (Kützing) Petersen | * | | 3.4 | 1 |
| 2 | 4.93 | ECPM | - | Encyonopsis minuta Krammer & Reichardt | * | | 4 | 2 |
| 2 | 4.93 | FCRO | - | Fragilaria crotonensis Kitton | * | | 4 | 1 |
| 2 | 4.93 | CLNT | CPLI | Cocconeis lineata Ehrenberg | * | | 4 | 1 |
| 2 | 4.93 | MVAR | - | Melosira varians Agardh | * | | 4 | 1 |
| 2 | 4.93 | NCTV | - | Navicula caterva Hohn & Hellerman | * | | 3 | 1 |
| 2 | 4.93 | ENLB | - | Encyonema lange-bertalotii Krammer morphotype 1 | * | | 4 | 1 |
| 2 | 4.93 | DCOT | - | Diadesmis contenta (Grunow ex V. Heurck) Mann | * | | 4 | 1 |
| 2 | 4.93 | NGRE | - | Navicula gregaria Donkin | * | | 3.4 | 1 |
| 2 | 4.93 | DTEN | - | Denticula tenuis Kützing | * | | 5 | 3 |
| 2 | 4.93 | NAMP | - | Nitzschia amphibia Grunow f.amphibia | * | | 2 | 2 |
| 2 | 4.93 | CAEX | - | Cymbella excisa Kützing var. excisa | * | | 4 | 2 |
| 1 | 2.46 | SANG | - | Sunrella angusta Kützing | * | | 4 | 1 |
| 1 | 2.46 | ENVE | - | Encyonema ventricosum (Kützing) Grunow in Schmidt & al. | * | | 4.8 | 1 |
| 1 | 2.46 | UULN | - | Ulnaria ulna (Nitzsch.) Compère | * | | 3 | 1 |
| 1 | 2.46 | UBIC | - | Ulnaria biceps (Kützing) Compère | * | | 3 | 1 |
| 1 | 2.46 | NAAM | - | Navicula amphiceropsis Lange-Bertalot & Rumrich | * | | 3 | 3 |
| 1 | 2.46 | NGER | - | Navicula germainii Wallace | * | | 3 | 2 |
| 1 | 2.46 | NREC | - | Nitzschia recta Hantzsch in Rabenhorst | * | | 3 | 2 |
| 1 | 2.46 | NLAN | - | Navicula lanceolata (Agardh) Ehrenberg | * | | 3.8 | 1 |
| 1 | 2.46 | NIAR | - | Nitzschia archibaldii Lange-Bertalot | * | | 3.8 | 2 |

IDSE/S 3.61
degradation low
organic pollution low
anthropogenic eutrophication low

## MACROFITE –DATI GREZZI

### Campagna estiva n°9/2011

| stazione | 1 | 3 | 4 | 6 | 7 | 8 | 11 | 14 | 15 | 19 | 21 | 24 | 25 | 26 | 27 | 31 | 32 | 35 | 36 | 39 | 42 | 47 | 59 | 62 | 63 | 68 | 73 | 77 | 78 | 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alisma lanceolatum With. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alisma plantago-aquatica L. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | + | + | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 |
| Berula erecta (Huds.) Coville | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | + | 0 | + | + | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Butomus umbellatus L. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 |
| Callitriche stagnalis Scop. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carex elata subsp. elata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratophyllum demersum L. | + | + | 5 | + | 5 | + | + | 0 | + | + | 0 | 0 | + | 0 | 0 | + | 5 | + | 0 | 0 | + | 0 | + | 5 | + | + | + | + | 0 | 0 |
| Egeria densa Planch. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elodea canadensis Michx. | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elodea nuttallii (Planch.) H. St.John | 5 | 0 | + | + | + | + | 5 | + | 0 | 0 | 0 | + | + | 0 | 0 | 0 | 0 | + | 0 | + | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equisetum ramosissimum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Groenlandia densa (L.) Fourr. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iris pseudoacorus L. | + | 0 | + | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lagarosiphon major (Ridl.) Moss | 5 | 0 | 5 | 5 | 5 | + | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | + | 5 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lemna minor L. | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | + | 0 | 0 | 0 | + | 0 | 0 | + | 5 | + | + | 0 | 0 | 0 |
| Lemna minuta Kunth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | + | + | 0 | 0 |
| Lemna trisulca L. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lindernia dubia (L.) Pennell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | + |
| Lindernia palustris Hartmann | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ludwigia hexapetala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 5 | 5 | 0 |
| Lythrum salicaria L. | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | + | + | + | + | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mentha aquatica subsp. aquatica | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Myosotis scorpioides | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Myriophyllum spicatum L. | 5 | + | 5 | + | 5 | + | 5 | + | 5 | + | 0 | + | 5 | + | 0 | + | 5 | + | + | + | + | + | 0 | 5 | 5 | 0 | + | 0 | 0 | 0 |
| Najas marina L. subsp. marina | 5 | + | + | + | + | 0 | + | + | + | 0 | 0 | 0 | 5 | 0 | 0 | + | 5 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 0 | 0 | 0 | 0 | 0 |
| Nasturtium officinale subsp. officinale | + | 0 | + | 0 | 0 | 0 | 0 | + | 0 | + | 0 | 0 | 0 | + | + | + | 0 | + | + | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nuphar lutea (L.) Sm. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paspalum distichum L. | + | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 0 | + | + | 0 | 0 | + | 5 | 0 | 0 | 5 | 5 | + | + | 5 | + |
| Persicaria amphibia (L.) Delarbre | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Persicaria hydropiper (L.) Spach | 0 | 0 | + | 0 | + | + | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | + | + | + | + | + | + | + | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 0 |
| Phalaris arundinacea subsp. arundinacea | + | 0 | + | 0 | + | 0 | + | 0 | 0 | 0 | + | 0 | 0 | + | + | + | 5 | + | + | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Potamogeton crispus L. | 5 | 0 | + | 0 | + | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Potamogeton pectinatus L. | 5 | 0 | 5 | 0 | 5 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Potamogeton perfoliatus L. | + | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 |
| Potamogeton polygonifolius Pourr. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 |
| Potamogeton pusillus L. | 0 | 0 | 0 | 0 | + | + | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | + | + | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ranunculus trichophyllus Chaix subsp. trichophyllus | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 5 | 0 | + | 5 | 5 | + | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rorippa amphibia (L.) Besser | 0 | 0 | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | + | + | + | + | + | + | + | + | + | 0 | 0 | 0 | 0 | 0 | + | + | + | + |
| Sparganium erectum L. s.l. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spirodela polyrhiza (L.) Schleid. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | + | + | + | + | + |
| Valeriana collina xx | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vallisneria spiralis L. | 45 | + | 5 | + | 5 | + | 10 | + | 5 | + | + | + | 4 | + | 0 | 0 | 5 | + | + | + | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 |
| Veronica anagallis-aquatica L. | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | + | 0 | 0 | 0 | + | + | + | + | 0 | + | 0 | + | 0 | 0 | 0 | 0 | + | 0 | + | + | + |
| Veronica beccabunga | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zannichellia palustris L. subsp. polycarpa | + | 0 | + | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 5 | + | 0 | 0 | 0 | 0 | + | + | + | + | 0 | 0 | 0 | 5 | + | 0 | + | 0 | 0 |
| Salvinia natans (L.) All. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Amblystegium fluviatile (Hedw.) Schimp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fontinalis antipyretica Hedw. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | + | + | + | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chaetophora incrassata | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chara globularis | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chetophora sp. non incrassata | 0 | + | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | + | 0 | + | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cladophora sp. | + | 5 | 5 | 5 | 5 | 5 | 5 | 5 | + | 5 | 35 | 40 | 5 | 45 | 55 | 60 | 0 | 70 | 80 | 45 | 55 | 0 | 0 | + | + | + | + | + | + | 0 |
| Hydrodictyon reticulatum | 5 | 5 | + | 5 | + | 0 | + | 0 | 0 | 0 | 5 | + | + | + | + | 5 | + | + | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 |
| Lyngbya sp. | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIcrospora sp. | + | 0 | 0 | 0 | + | 0 | + | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 0 | 0 | + | 0 | 0 | 0 |
| Oedocladium sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oscillatoria sp. | 5 | 5 | 5 | + | 5 | + | + | + | 5 | 5 | 5 | 5 | 5 | 5 | + | 5 | 5 | 5 | 5 | 5 | 5 | 5 | + | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Phormidium sp. | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rhizoclonium sp. | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | + | 0 | 0 | 5 | 5 | 0 | 5 | 5 | 5 | 0 | 5 | 0 | 0 | + | 5 | 0 | 0 | 0 |
| Spirogyra sp. | 5 | + | + | + | 5 | 0 | 5 | 0 | 5 | 5 | + | + | 5 | + | 0 | 5 | 5 | 5 | 5 | 35 | 5 | 5 | 0 | 5 | + | 5 | 15 | 10 | 5 | 5 |
| Stigeoclonium sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | + | + | + | + | + |
| Tetrasporidium sp. | + | 0 | 0 | 0 | + | 5 | + | + | + | 0 | 0 | + | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thorea hispida | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | + | 0 | 0 | 0 |
| Ulothrix sp. | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | + | 0 | 5 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vaucheria sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zygnema sp. | 0 | 0 | 0 | 5 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# ALLEGATO III

## TRATTI FLUVIALI:
## CONFRONTO SPERIMENTAZIONE - PROPOSTA REGIONALE

**ALLEGATO III** - **Tratti fluviali definiti dalla Sperimentazione a confronto con i tratti fluviali proposti dalla Regione Lombardia**

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| FN01A | 112,1 | OGS_1_1A | | | **1** | 112,2 | Sarnico | **DIGA DI SARNICO** *(Loc. Fosio - monte traversa Sarnico)* | | | | | | **1** | **ID, M** | fluviale (riferimento) |
| | | OGS_1_1B | Discontinuità longitudinale artificiale | Sbarramento Sarnico e Centrale Castel Montecchio | **2** (1,1 km) | 112,2 | Paratico | **1** | **ROGGIA FUSIA FRANCIACORTA** | 58,00 | 51,90 | 10,02 | **5,80** | | | |
| | | | | | | 112,2 | Sarnico | **2** | **CENTRALE CASTEL MONTECCHIO** | 58,00 | 51,90 | 60,00 | **5,80** | | | |
| IN02A | 112,2 | | | | | 112+ | | TORRENTE GUERNA | | | | | | **2** | M | immissario |
| STA03 | 112,7 | | | | | 112+ | Paratico | valle Torrente Guerna *(Sarnico loc. Molini)* | | | | | | **3** | M | fluviale |
| | | | | | | 113,3 | | restituzione Centrale Castelmontecchio | | | | | | | | |
| FN04A | 113,3 | OGS_1_2A | Discontinuità longitudinale artificiale | Restituzione Centrale Castel Montecchio | **3** (1,2 km) | 114- | Paratico | monte depuratore Paratico *[valle centrale Castelmontecchio (Capriolo)]* | | | | | | **4** | M | fluviale (riferimento) |
| ID05A | 113,8 | | | | | 114- | Paratico | scarico depuratore Paratico | | | | | | **5** | M | depuratore |
| | | OGS_1_2B | Discontinuità longitudinale artificiale | Sbarramento Centrale Capriolo | **4** (600 m) | 114,1 | Capriolo | **3** | CENTRALE CAPRIOLO | 58,00 | 51,30 | 70 | 5,8 | | | |
| STB06 | 114,2 | | | | | 114+ | | valle depuratore Paratico | | | | | | **6** | ID, M | fluviale |
| | | OGS_1_3A | Discontinuità longitudinale artificiale | Restituzione Centrale Capriolo | **5** (1,5 km) | 114,7 | | restituzione centrale Capriolo | | | | | | | | |
| FN07A | 114,8 | | | | | 115- | Capriolo - BS | Capriolo *(valle centrale Capriolo)* | | | | | | **7** | | **fluviale (stazione ARPA)** |
| | | OGS_1_3B | Discontinuità longitudinale artificiale | Sbarramento Centrale Tagliuno | **6** (2,5 km) | 115,8 | Castelli Calepio | **4** | **CENTRALE TAGLIUNO** | 58,70 | 51,40 | 33,00 | **5,87** | | | |
| STC08 | 116,4 | | | | | 116+ | Capriolo | valle sbarramento Tagliuno *(Porto Calepio valle ponte)* | | | | | | **8** | **ID** | fluviale |
| | | | | | | ? | | restituzione centrale Tagliuno | | | | | | | | |

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| FN09A | 118,2 | OGS_1_4A | Discontinuità longitudinale artificiale | Restituzione Centrale Tagliuno | **7** (500 m) | 118+ | | monte depuratore Molino di Castelli Calepio | | | | | | **9** | M | fluviale |
| ID10A | 118,3 | | | | | 118+ | | scarico depuratore Molino di Castelli Calepio | | | | | | **10** | M | depuratore |
| | | | | | **8** (1,4 km) | 118,2 | Capriolo | **5** | **SOLLEVAMENTO FRANCIACORTA** | 58,70 | 50,60 | 0,45 | **5,87** | | | |
| FN11A | 119,3 | | | | | 120- | Palazzolo | valle depuratore Molino *(monte traversa Italgen)* | | | | | | **11** | M | fluviale |
| | | OGS_1_4B | Discontinuità longitudinale artificiale | Sbarramento Centrale Palazzolo | **9** (2,3 km) | 119,8 | Castelli Calepio | **6** | **SOLLEVAMENTO MEDIA PIANURA BERGAMASCA** | 59,10 | 50,40 | 0,60 | **5,91** | | | |
| | | | | | | 119,8 | Palazzolo | **7** | **ROGGIA VETRA** | 59,10 | 50,40 | 11,53 | **5,91** | | | |
| | | | | | | 119,8 | Palazzolo | **8** | **CENTRALE PALAZZOLO** | 59,10 | 50,40 | 48,00 | **5,91** | | | |
| STD12 | 120,3 | | | | | 120+ | | valle sbarramento Palazzolo | | | | | | **12** | **ID, M** | fluviale (riferimento) |
| ID13A | 121,2 | | | | | 121+ | | scarico depuratore Cividino | | | | | | **13** | M | depuratore |
| STD14 | 121,9 | | | | **10** (800 m) | 122+ | | valle depuratore Cividino | | | | | | 14 | M | fluviale |
| | | | | | | 122,1 | | restituzione Centrale Palazzolo | | | | | | | | |
| | | OGS_1_5A | Discontinuità longitudinale artificiale | Restituzione Centrale Palazzolo | **11** (1,3 km) | 122,9 | Palazzolo | **9** | **ROGGIA CASTRINA** | 59,70 | 49,90 | 4,94 | **5,97** | | | |
| FN15A | 123,4 | | | | | 124- | Palazzolo | valle Seriola Castrina *(Ponte SS 573 - tangenziale Palazzolo)* | | | | | | **15** | **ir** | fluviale |
| | | OGS_1_5B | Discontinuità longitudinale artificiale | Sbarramento Centrale Palosco | **12** (1,5 km) | 124,1 | Palazzolo | **10** | **ROGGIA TRENZANA TRAVAGLIATA** | 60,30 | 50,10 | 6,90 | **6,03** | | | |
| | | | | | | 124,1 | Palazzolo | **11** | **ROGGIA SALE** | 60,30 | 50,10 | 5,38 | **6,03** | | | |
| | | | | | | 124,1 | Palazzolo | **12** | **CENTRALE PALOSCO** | 59,10 | 50,10 | 32,00 | **5,91** | | | |
| STE16 | 124,3 | | | | | 124+ | | valle sbarramento Palosco *(valle traversa centrale Palosco)* | | | | | | **16** | **ID,M** | fluviale (riferimento) |
| ID17A | 124,5 | | | | | 125- | Palazzolo | scarico depuratore Palazzolo | | | | | | **17** | M | depuratore |
| STE18 | 124,9 | | | | | 125- | | valle depuratore Palazzolo | | | | | | **18** | M | fluviale |
| | | OGS_1_6A | Discontinuità longitudinale artificiale e naturale | Traversa Roggia Baiona e confluenza del fiume Cherio | **13** (1,1 km) | 125,6 | | restituzione Centrale Palosco | | | | | | | | |
| | | | | | | 125,9 | Pontoglio | **13** | **ROGGIA BAJONA** | 60,60 | 49,80 | 3,26 | 6,06 | | | |
| FN19A | 126,6 | | | | | 127- | | valle Roggia Bajona monte confluenza Cherio | | | | | | **19** | **ir, M** | fluviale |
| IN20A | 126,5 | | | | | 126,8 | | **FIUME CHERIO** | | | | | | **20** | **M** | **immissario** |
| FN21A | 127,1 | | | | | 127- | Pontoglio | valle confluenza Cherio *(valle immissione Cherio)* | | | | | | **21** | M | fluviale |

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| | | OGS_1_7A | Discontinuità longitudinale artificiale | Traversa Roggia Rudiana-Vescovada | **14** (5,1 km) | 128,6 | Pontoglio | **14** | **ROGGIA RUDIANA VESCOVADA** | 63,90 | 54,00 | 3,36 | 6,39 | | | |
| FN22A | 128,8 | | | | | 129- | | monte depuratore Pontoglio | | | | | | **22** | M | fluviale |
| ID23A | 129,1 | | | | | 129+ | | scarico depuratore Pontoglio | | | | | | **23** | M | depuratore |
| | | | | | | 129,7 | Pontoglio | **15** | **ROGGIA CASTELLANA** | 64,10 | 54,40 | 4,80 | 6,41 | | | |
| FN24A | 129,9 | | | | | 130- | Cividate al Piano | valle depuratore Pontoglio e Rogge Rudiana e Castellana *(Cividate al Piano)* | | | | | | **24** | **ir, M** | fluviale |
| | | | | | | 131,5 | Cividate al Piano | **16** | **ROGGIA DONNA** | 64,30 | 55,70 | 2,48 | 6,43 | | | |
| FN25A | 131,5 | | | | | 132- | | valle Roggia Donna | | | | | | **25** | **ir** | fluviale |
| | | OGS_1_7B | Discontinuità longitudinale artificiale | Sbarramento Centrale di Urago d'Oglio | **15** (3,2 km) | 131,7 | Pontoglio | **17** | **CENTRALE URAGO D'OGLIO** | 64,30 | 55,80 | 22,00 | **6,43** | | | |
| STF26 | 132,4 | | | | | 133- | Pontoglio | valle centrale Urago *(valle traversa centrale Urago - loc. S. Martino)* | | | | | | **26** | **ID** | fluviale |
| | | | | | **16-17** (1,6 km) | 134,3 | | restituzione centrale Urago | | | | | | | | |
| | | OGS_2 | Discontinuità longitudinale artificiale | Naviglio di Cremona/ Roggia Antegnata | | 135 | Cividate al Piano | **18** | **NAVIGLIO CIVICO DI CREMONA** | 64,70 | 57,90 | 10,46 | 6,47 | | | |
| | | | | | | 135,4 | Calcio | **19** | **ROGGIA ANTEGNATA** | 64,70 | 58,00 | 2,29 | 6,47 | | | |
| FN27A | 135,9 | | | | | 136- | Cividate al Piano | valle Naviglio Civico e Roggia Antegnata *(monte Naviglio Civico Cremona)* | | | | | | **27** | **ir** | fluviale |
| | | OGS_3 | Discontinuità longitudinale artificiale | Traversa di Urago d'Oglio (Roggia Molina) | **18-19** (4,7 km) | 136,7 | Urago d'Oglio | **20** | **ROGGIA MOLINA** | 64,80 | 58,80 | 1,38 | **6,48** | | | |
| | | | | | | 137,1 | Calcio | **21** | **ROGGIA CALCIANA** | 64,90 | 59,10 | 1,90 | **6,49** | | | |
| FN28A | 137,8 | | | | | 138- | Urago d'Oglio | monte depuratore Calcio *(monte ponte SS 11)* | | | | | | **28** | M | fluviale (riferimento) |
| ID29A | 139 | | | | | 139+ | | scarico depuratore Calcio | | | | | | **29** | M | depuratore |
| FN30A | 140,8 | | | | | 141- | Calcio | valle depuratore Calcio *(monte presa Naviglio Grande Pallavicino)* | | | | | | **30** | M | fluviale |
| | | OGS_4 | Discontinuità longitudinale artificiale | Traversa di Calcio | **20** (2,4 km) | 141 | Calcio | **22** | **NAVIGLIO GRANDE PALLAVICINO** | 65,10 | 61,30 | 9,88 | 6,51 | | | |
| FS30B | 141,2 | | | | | 141 | | **FINE "SISTEMA OGLIO"** | | | | | | | | |
| FS31A | 142,9 | | | | | 143- | Calcio | valle Naviglio Grande e monte depuratore Rudiano *(valle presa Naviglio Grande Pallavicino)* | | | | | | **31** | **ir, M** | fluviale (riferimento) |
| ID32A | 143,3 | | | | | 143+ | Rudiano | scarico depuratore Rudiano | | | | | | **32** | M | depuratore |
| FS32B | 143,5 | | | | | | Rudiano | *(Lanca Biblello)* | | | | | | | | |

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| | | OGS_5 | Discontinuità longitudinale artificiale | Traversa di Pumenengo (Cavo Molinara) | **21** (4,1 km) | 143,5 | Pume-nengo | **23** | **ROGGIA MOLINARA** | 65,40 | 61,80 | 4,60* | **6,54** | | | |
| FS33A | 143,8 | | | | | 144- | Pume-nengo | valle Roggia Molinara e depuratore *(valle traversa Molinara)* | | | | | | **33** | **ir, M** | fluviale (riferimento) |
| IP34A | 144,9 | | | | | 145- | | scarico impianto acquacoltura Rudiano | | | | | | **34** | M | scarico acqua-coltura |
| FS35A | 145,9 | | | | | 146+ | | valle scarico acquacoltura Rudiano | | | | | | **35** | M | fluviale |
| | | OGS_6 | Discontinuità longitudinale artificiale | Traversa (Cavo di suppeditazione) | **22-23** (22,9 km) | 147,3 | Torre Palla-vicina | **24** | **CAVO DI SUPPEDITA-ZIONE** | 65,60 | 62,00 | 4,60* | 6,56 | | | |
| | | | | | | | | **NUOVA STAZIONE di MISURA** | | | | | | | | |
| FS36A | 147,7 | | | | | 148- | Rocca-franca | a valle del cavo di Suppeditazione e Roggia Conta *(valle presa roggia Conta)* | | | | | | 36 | ir, M | fluviale (riferimento) |
| | | | | | | 148,9 | Rocca-franca | **25** | **ROGGIA CONTA DI BARCO** | 65,90 | 62,30 | 0,75 | 6,59 | | | |
| IP37A | 149,1 | | | | | 149+ | | scarico impianto acquacoltura Torre Pallavicina | | | | | | **37** | M | scarico acqua-coltura |
| FS38A | 149,8 | | | | | 150- | Torre Pallavicina | **SIC-ZPS Bosco de l'Isola** - valle acquacoltura Torre Pallavicina *(località cascina Ca' della Vigna)* | | | | | | **38** | L, M | fluviale |
| FS38B | 152,9 | | | | | | Soncino | *(valle ponte tangenziale Orzinuovi-* | | | | | | 38B | | |
| FS39A | 154,6 | | | | | | | | | | | | | | | |
| FS39B | 157,8 | OGS_7 | Discontinuità longitudinale artificiale | Traversa al ponte di Soncino | | 158- | Soncino | **SIC-ZPS Bosco di Barco** *(valle ponte SS 235 Orzinuovi Soncino)* | | | | | | **39** | L | fluviale - ambiente laterale |
| | | | | | | | Orzinuovi | *(Barco - Località cascina Ricna)* | | | | | | 39B | | |
| | | | | | | | | | | | | | | | | |
| FS40A | 162,1 | | | | | 162+ | Villa-chiara | **SIC-ZPS Bosco Marisca -** monte scolmatore Genivolta *(loc. Bompensiero)* | | | | | | **40** | L, M | fluviale (riferimento) - fluviale ambiente laterale |
| | | | | | | | | | | | | | | | | |
| IA41A | 163,8 | OGS_8 | Discontinuità pedologica | VA8 --> VA8/VA6 | | 164- | | scolmatore di Genivolta | | | | | | **41** | M | immissario |
| FS42A | 164,3 | | | | | 164+ | Villa-chiara | **SIC scolmatore Genivolta - SIC-ZPS Isola Uccellanda -** valle scolmatore Genivolta *(valle scolmatore Genivolta)* | | | | | | **42** | L, M | fluviale - ambiente laterale |
| FS43A | 168,9 | | | | | 169- | | **SIC Lanche Anzanello** | | | | | | **43** | L | fluviale - ambiente laterale |
| FS44A | 170,5 | | | | **24** (16,7 km) | 171- | Castel visconti - CR | Castelvisconti *(ponte SP 65 presso Acqualunga - monte ponte Castelvisconti (Borgo S. Giacomo))* | | | | | | **44** | | **fluviale - stazione ARPA** |
| FS45A | 175,2 | OGS_9 | Discontinuità granulometrica | dal 70% ghiaia a 70% sabbia | | 176- | Bordolano | monte Roggia Saverona *(ponte SP 86 - monte ponte Bordolano)* | | | | | | **45** | M | fluviale (riferimento) |
| IN46A | 177,8 | | | | | 178- | | ROGGIA SAVERONA | | | | | | **46** | M | immissario |
| FS47A | 179,9 | | | | | 180- | Verola-vecchia | valle Roggia Saverona *(Cascina Bianca - Cascina Solitario)* | | | | | | **47** | M | fluviale |
| FS48A | 186,5 | | | | | 187- | Pontevico | monte fiume Strone *(confluenza Strone)* | | | | | | **48** | M | fluviale (riferimento) |

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| IN49A | 187 | OGS_10 | Discontinuità longitudinale naturale | confluenza del fiume Strone | **25** (16,7 km) | 187 | Pontevico | **FIUME STRONE** | | | | | | **49** | **M** | **immissario** |
| FS50A | 187,2 | | | | | 187+ | Pontevico | valle Strone e monte Seriola Pontevico *(valle ponte SS 45 Pontevico)* | | | | | | **50** | M | fluviale (riferimento) |
| IN51A | 188 | | | | | 188+ | | SERIOLA PONTEVICO | | | | | | **51** | M | immissario |
| FS52A | 188,3 | | | | | 189- | Corte de' Frati | valle Seriola Pontevico *(immissione loc. Grumone)* | | | | | | **52** | M | fluviale |
| FS52B | 190,9 | | | | | | | | | | | | | | | |
| FS52C | 195,2 | | | | | | Scando-lara Ripa d'Oglio | *(località Cà Nova)* | | | | | | | | |
| FS53A | 197,2 | | | | | 203- | Seniga | monte fiume Mella *(monte ponte Seniga)* | | | | | | **53** | M | fluviale (riferimento) |
| FS53B | 198 | | | | | | Seniga | *(valle ponte Seniga)* | | | | | | 53B | | |
| FS53C | 202,8 | | | | | | Gabbio-neta B. | *(monte confluenza Mella - loc. Casamento)* | | | | | | | | |
| IN54A | 203,3 | OGS_11 | Discontinuità longitudinale naturale | confluenza del fiume Mella | **26** (4,1 km) | 203,5 | | **FIUME MELLA** | | | | | | **54** | **M** | **immissario** |
| FS55A | 203,4 | | | | | 204- | Gabbio-neta B. | **SIC Lanche Gabbioneta** - valle Mella 200 m *(valle confluenza Mella)* | | | | | | **55** | L, M | fluviale - ambiente laterale |
| FS56A | 204,2 | | | | | 204+ | | valle Mella 700 m | | | | | | **56** | M | fluviale |
| FS57A | 204,7 | | | | | 205- | | valle Mella 1200 m | | | | | | **57** | M | fluviale |
| FS58A | 205,1 | | | | | 205 | | valle Mella 1700 m | | | | | | **58** | M | fluviale |
| | | | | | **27** (11 km) | 206 | Ostiano | **26** | **CONSORZIO IRRIGAZIONE OSTIANESE NUOVA** | 98,70 | 91,60 | **1,06** | **9,87** | | | |
| FS59A | 206,7 | | | | | 206+ | Ostiano - CR | Ostiano *(ponte di Ostiano)* | | | | | | **59** | | **fluviale - stazione ARPA** |
| FS59B | 209,1 | | | | | | | | | | | | | | | |
| FS59S | 208,7 | | | | | | | | | | | | | | | |
| FS59T | 213,2 | | | | | | Ostiano | *(immissione presso loc. Cascina Mezzulli)* | | | | | | 59B | | |
| FS60A | 215,9 | | | | | 216- | Pessina CR | monte fiume Gambara *(immissione presso loc. Cascina Campagnino)* | | | | | | **60** | M | fluviale (riferimento) |
| IN61A | 216,1 | | | | | 216+ | | FIUME GAMBARA | | | | | | **61** | L, M | immissario - fluviale - ambiente laterale |
| FS62A | 216,3 | | | | | 216+ | Volongo | **ZPS Foce Gambara -** valle fiume Gambara *(valle immissione Canale* | | | | | | **62** | M | fluviale |

| Tratti proposti dal gruppo di lavoro | | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| FS63A | 218,9 | OGS_12 | Discontinuità longitudinale artificiale | Traversa al ponte di Isola Dovarese | **28** (17 km) | 219- | Canneto sull'Oglio - MN | | Canneto sull'Oglio *(valle traversa Isola Dovarese)* | | | | | **63** | M | **fluviale - stazione ARPA** |
| FS64A | 223,3 | | | | | 223+ | Canneto sull'Oglio | | **SIC Lanche Gerre Gavazzi e Runate** *(valle loc. Carzaghetto)* | | | | | **64** | L | fluviale - ambiente laterale |
| IN65A | 224,6 | | | | | 225- | | | **ZPS Lanche Castelfranco** | | | | | **65** | L | fluviale - ambiente laterale |
| IN66A | 227,7 | OGS_13 | Discontinuità pedologica | da VA8/VA3 a VA6/VA3 | | 228- | Canneto sull'Oglio | | Naviglio di Canneto | | | | | **66** | M | immissario |
| FS67A | 228 | | | | | **228+** | | | valle Naviglio di Canneto | | | | | **67** | M | fluviale |
| | | | | | | | | | *(valle ponte Canneto sull'Oglio)* | | | | | | | |
| FS68A | 233 | | | | | 233 | | | monte S. Maria di Calvatone e F. Chiese | | | | | **68** | **ir, M** | fluviale (riferimento) |
| | | | | | **29** (1,9 km) | 233,1 | Piadena | **27** | **SOLLEVAMENTO S.MARIA DI CALVATONE** | 113,00 | 104,40 | 7,00 | 11,30 | | | |
| IN69A | 234,8 | OGS_14 | Discontinuità longitudinale naturale | confluenza del fiume Chiese | | 235 | | | **FIUME CHIESE** | | | | | **69** | **L, M** | **immissario** - fluviale - ambiente laterale |
| FS70A | 235,2 | | | | **30** (15,1 km) | 235 | Acqua-negra sul Chiese | | **ZPS Foce Chiese** - valle Chiese 200 m *(valle confluenza Chiese)* | | | | | **70** | M | fluviale |
| FS71A | 235,4 | | | | | 235+ | | | valle Chiese 700 m | | | | | **71** | M | fluviale |
| FS72A | 236 | | | | | 236 | | | valle Chiese 1200 m | | | | | **72** | M | fluviale |
| FS73A | 236,4 | | | | | | | | | | | | | | | |
| | | | | | | 237- | | | valle Chiese 1700 m | | | | | **73** | M | fluviale |
| FS74A | 237,1 | | | | | | | | | | | | | | | |
| FS74S | 238,8 | | | | | 237+ | Calvatone | | **SIC ZPS Le Bine** *(valle ponte Calvatone)* | | | | | **74** | L | fluviale - ambiente laterale |

| Tratti proposti dal gruppo di lavoro | | | | Tratti proposti da Regione Lombardia | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Codice Stazione | km | TRATTI | Tipologia di discontinuità | TRATTI OMOGENEI Regione Lombardia | progressiva km | Comune | opere di presa | | Portate (m3/s) | | | | staz. Monitoraggio del progetto DMV Oglio | | |
| | | | | | | | n. | Nome opera di presa o stazione di monitoraggio *(tra parentesi stazioni monitoraggio ittiofauna)* | **Qm** secondo PTUA | **Qm** calcolata C.Oglio | Q max derivata irrigua/idroel. | DMV idrologico | n. stazione | finalità (°) | tipo |
| FS74T | 241,3 | OGS_15 | Discontinuità pedologica | | | | | | | | | | | | |
| FS75A | 243,1 | | | | 243+ | Calvatone | monte Dugale Delmona *(loc. Mosio - valle gasdotto Calvatone)* | | | | | | **75** | M | fluviale (riferimento) |
| IA76A | 243,4 | | | | 243+ | | Dugale Delmona | | | | | | **76** | M | immissario |
| FS77A | 243,5 | | | | 244- | Bozzolo | valle Dugale Delmona *(immissione monte Marcaria)* | | | | | | **77** | M | fluviale |
| FS78A | 243,9 | | | | 244 | Bozzolo - MN | Bozzolo *(Prismata - monte Ponti Marcaria)* | | | | | | **78** | | **fluviale - stazione** |
| FS78B | 245,9 | | | **31-32** (14 km) | 250,1 | Marcaria - MN | **28** | **SOLLEVAMENTO S.MICHELE IN BOSCO** | 158,00 | 148,60 | **0,17** | **15,80** | | | |
| FS79A | 253 | | | | 255,6 | Marcaria - MN | Gazzuolo | | | | | | **79** | FS79B | fluviale |
| | | | | | 257,2 | Marcaria - MN | **29** | **SOLLEVAMENTO MALDINARO DI MARCARIA** | 158,70 | 149,40 | **0,80** | **15,87** | | | |
| FS79B | 257,3 | | | | 257,3 | Marcaria - MN | (Loc. Cascina S. Lorenzo) | | | | | | | | |
| FS79C | 261,1 | OGS_16 | Discontinuità pedologica | | 261+ | Marcaria - MN | **SIC ZPS Golene S. Alberto** *(Campitello - loc. Casale Tosa)* | | | | | | **79** | L | fluviale-lanca |
| | | | | **33** (6 km) | 264 | Marcaria - MN | **30** | **SOLLEVAMENTO TORRE D'OGLIO (CESOLE)** | 158,90 | 149,60 | **0,80** | **15,89** | | | |
| FS80A | 265,6 | | | | 266- | Marcaria - MN | **SIC ZPS Saliceto Foce d'Oglio -** Marcaria *(ponte barche Sabbioni alla foce)* | | | | | | **80** | L | **fluviale - stazione ARPA** - ambiente laterale |
| | | | | | 266,8 | Marcaria - MN | **CONFLUENZA IN PO** | | | | | | | | |