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Obituary- Guy Levavasseur (1951-2024)

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Obituary

Guy Levavasseur (1951-2024)

I met Guy in 1971 in the classrooms and lecture halls of the University of Caen. Guy started university a year before me, in 1970 after passing his baccalaureate at the Le Verrier high school in Saint-Lô in the Manche department. Both natives from this Normandy department, we quickly crossed paths at the University Restaurant, in the gyms and on the road to go at Caen on Monday mornings.

After obtaining his master's degree in natural sciences in 1974, Guy went to the ENS rue d'Ulm in Paris, as an external candidate to the aggregation in Natural during the academic year 1975-1976. Then, during the year 1976-1977, he graduated in algology at the University of Paris VI and did his practical internship at the Roscoff Biological Station. Having myself graduated in Oceanology in Paris VI in 1976, I joined the Roscoff Biological Station in August 1977, after a year as a scientist within the national military service, to start a postgraduate doctorate PhD thesis under the supervision of Louis Cabioch. Guy started his thesis at the same time under the supervision of Professor Georges Giraud of the Ecole Normale Supérieure in Paris and Professor Alexis Moyse, both specialists in photosynthesis. It was during our time as doctoral students that we developed a great friendship.

Guy first worked on calcareous algae, then very quickly studied the ecophysiology of ulvae: *Ulva* sp. At that moment I was teasing him because I told him that he did not know the name of the species he was working on. It later turned out that the taxonomy of green algae, ulvae of the genus *Ulva*, was more complex than the one we knew at the end of the 1970s.

He joined the CNRS on October 1, 1979 while he was finishing his postgraduate PhD thesis at the end

of 1980 on the 'Comportement photosynthétique de quelques macrophytes benthiques de la région de Roscoff : intérêt écophysologique et incidence sur la productivité'.

At the beginning of his career, he conducted numerous experiments in small mesocosms, with a magnetic stirrer mixing the volume of water into which he introduced pieces of algae, allowing him to measure the flow of oxygen produced by respiration and to deduce the amount of carbon dioxide consumed during photosynthesis. The experiments were carried out day and night, with variations in illumination also giving him the opportunity to understand the phenomenon of adaptation and photoinhibition when the amount of light was too intense.

After defending his second PhD in 1986 on the 'Plasticité de l'appareil pigmentaire des algues marines macrophytes : régulation en fonction de l'environnement' he did a post-doctoral stay as a CNRS member in the United States for two years from 1989 to 1991, at Duke University in North Carolina. In addition to learning new research methods, particularly on fluorescence measurements, still in his chosen field on the ecophysiology of algae, he was giving several lectures in different states of the US, including Montana, where there was a university located in the middle of nowhere, a visit that had a strong impression on him.

After returning from the United States, he continued his research on the ecophysiology of algae by enriching his panel of biological models such as on *Laminaria* kelp, a genus of large algae very present in Brittany, with colleagues from the marine stations of Roscoff and Wimereux, then on marine *Zostera* eelgrass, in

cooperation with colleagues from the Arcachon basin and the Sète lagoon in the Mediterranean.

At the end of his career, Guy became committed in both in the National Syndicate of Scientific Research (SNCS) and on the Board of the National Committee for Social Action and Mutual Aid (CAES), acting as a work advisor for the agents of the CNRS and its institutes. He was 100% relieved of his scientific activities during the last years of his career as a CNRS research fellow, which he left at the end of March 2016 at the age of 65. He continued to participate in the CAES actions for a few more years as a retiree. His work for the CAES often required him to travel from Roscoff to Paris or other CNRS sites across France, which tired him a lot due to his health issues.

Guy was not a very productive researcher in publications, probably because he was too perfectionist and did not want to publish results that he had not verified before. However, his work, in particular that which he published with his American colleagues from 1991 to 1993 following his post-doctoral stay, is among the most cited in the field of photosynthesis and ecophysiology of algae, and in particular on *Ulva*. Guy also excelled at oral communication and his presentations were always very much appreciated.

Guy also liked to share his knowledge with students and he gave an annual presentation of his work to the students of the « DEA » in Algology at Paris VI during their stay in Roscoff. He also supervised many students on IUT, bachelor's or master's internships. He was the supervisor of Taria Bajjouk, who defended her PhD thesis in 1996 on the topic 'Evaluation qualitative et quantitative des macroalgues à partir d'imagerie multispectrale: application à l'étude de la production de carbone dans la région de Roscoff.'

Guy has been part of several scientific councils, including the council on the proliferation of green algae in the Arcachon basin.

As we were very close when we were doctoral students and then researchers at the CNRS, Guy naturally became godfather to our daughter Camille born in 1982. He kept a very close tie to his birthplace in Notre-Dame-de-Cenilly in the Manche department, to which he was very attached and where he was buried on April 18, 2024.

Guy was also a secretive man who compartmentalized his time between his friends, his numerous colleagues, the associations in which he operated and his personal life. He will be remembered in all the circles of his scientific and personal activity, for his gift for communication, his joy of sharing a moment with others, and last but not least his gift for making puns.

List of Guy Levavasseur's publications

- Levavasseur G. 1977. *Etude écophysiological de la composition pigmentaire de quelques corallinacées*. Rapport de DEA Algologie, Paris VI.
- Levavasseur G. 1980. *Comportement photosynthétique de quelques macrophytes benthiques de la région de Roscoff : intérêt écophysiological et incidence sur la productivité*. Thèse de 3^{ème} Cycle, Paris VI.
- Levavasseur G. & Giraud G. 1982. Modification de la photosynthèse nette d'une Ulve de Roscoff en fonction de la durée d'éclaircissement. *Physiologie Végétale*, 20: 143-154.
- Levavasseur G. 1986. *Plasticité de l'appareil pigmentaire des algues marines macrophytes : régulation en fonction de l'environnement*. Thèse de doctorat d'état es Sciences, Sciences biologiques et fondamentales appliquées, Paris VI.
- Levavasseur G. 1987. Teneur en pigments et activité photosynthétique comparées de diverses algues macrophytes de la zone intertidale de Roscoff. *Cryptogamie Algologie*, 8: 253-271.
- Levavasseur G. 1988. *Stratégie de production de Sargassum muticum (Yendo) Fensholt. Etude écophysiological de la composition pigmentaire et de la capacité photosynthétique*. Contrat Ifremer 84/7602.
<https://archimer.ifremer.fr/doc/00077/18827/>
- Levavasseur G. 1989. Analyse comparée des complexes pigment-protéines de chlorophycophytes marines benthiques. *Phycologia*, 28: 1-14.
- Henley W.J., Levavasseur G., Franklin L.A., Osmond C.B. & Ramus J. 1991. Photoacclimation and photoinhibition in *Ulva rotundata* as influenced by nitrogen availability. *Planta*, 184: 235-243.
- Henley W.J., Levavasseur G., Franklin L.A. & Osmond C.B. 1991. Diurnal responses of photosynthesis and fluorescence in *Ulva rotundata* acclimated to sun and shade in outdoor culture. *Marine Ecology Progress Series*, 75: 19-28.
- Levavasseur G., Edwards G., Osmond C. & Ramus J. 1991. Inorganic carbon limitation of photosynthesis in *Ulva rotundata* (chlorophyta). *Journal of Phycology*, 27: 667-672.
- Franklin L.A., Levavasseur G., Osmond C.B., Henley W.J. & Ramus J. 1992. Two components of onset and recovery during photoinhibition of *Ulva rotundata*. *Planta*, 186: 394-408.
- Henley W.J., Lindley S.T., Levavasseur G. & Ramus J. 1992. Photosynthetic response of *Ulva rotundata* to light and temperature during emersion on an intertidal sand flat. *Oecologia*, 89: 516-523.
- Osmond C.B., Ramus J., Levavasseur G. & Henley 1993. Fluorescence quenching during photosynthesis and photoinhibition of *Ulva rotundata* blid. *Planta*, 190: 91-106.
- Levavasseur G. 1995. Fluorescence - application to the ecophysiology of seaweed. *Cryptogamie Algologie*, 16: 145-147.
- Björn L.O., Cunningham A., Dubinsky Z., Estrada M., Figueroa F.L., García-Pichel F., Häder D.P., Hanelt D., Levavasseur G. & Lüning K. 1996. Technical discussion I underwater light measurement and light absorption by algae. *Scientia Marina*, 60 (Suppl. 1): 293-297.
- Cunningham A., Levavasseur G., Estrada M., Hanelt D. & Whilhem C. 1996. Technical Discussion III Fluorescence measurements. *Scientia Marina*, 60 (Suppl.1): 301-302.
- Simon C., Ar Gall E., Levavasseur G., Deslandes E. 1999. Effects of short-term variations of salinity and temperature on the photosynthetic response of the red alga *Grateloupia*

- doryphora* from Brittany (France). *Botanica Marina*, 42: 437-440.
- Auby I., Levavasseur G., Plus M., Deslous Paoli J.M. & Grillas P. 1999. *Comparaison des capacités photosynthétiques des zostères naines de deux étangs méditerranéens : Lagune de Thau et étang du Vaccarès*. Colloque "Le milieu aquatique : interactions des facteurs environnementaux et impacts sur les organismes vivants". Brest, 30 septembre-1 octobre 1999. <https://archimer.ifremer.fr/doc/00152/26287/>
- Plus M., Chapelle A., Lazure P., Auby I., Levavasseur G., Verlaque M., Belsher T., Deslous-Paoli J.M., Zaldivar J.M. & Murray C.N. 2003. Modelling of oxygen and nitrogen cycling as a function of macrophyte community in the Thau lagoon. *Continental Shelf Research*, 23: 1877-1898.
- Gévaert F., Créach A., Davoult D., Migné A. & Levavasseur G., Arzel P., Holl A.C., Lemoine Y. 2003. *Laminaria saccharina* photosynthesis measured in situ: photoinhibition and xanthophyll cycle during a tidal cycle. *Marine Ecology Progress Series*, 247: 43-50.
- Plus M., Auby I., Verlaque M. & Levavasseur G. 2005. Seasonal variations in photosynthetic irradiance response curves of macrophytes from a Mediterranean coastal lagoon. *Aquatic Botany*, 81: 157-173.
- Valero M., Engel C., Arzel P., Créach A., Davoult D., Destombe C., Gevaert F., Leblanc C., Levavasseur G., Potin P. & Viard F. 2006. *Dynamique des champs de Laminaria digitata, ressource algale en Bretagne : Impacts biotiques, abiotiques et anthropiques*. Colloque de restitution 18-20 septembre 2006, Paris, Biodiversité et changement global, Réponses adaptatives au changement global : résultats et prospective IFB-GICC, pp. 37-45.

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