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REMEMBRANCES OF BACCIO BACCETTI (1)

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Dear Academicians, Ladies and Gentlemen

We are gathered here today to remember and pay tribute to a man who left his mark in various fields of scientific knowledge for more than 50 years, always in the forefront of what was known or supposed to be known, with the gaze and the desire to go beyond, whether dealing with human sterility, biogeography of animal populations, taxonomy, functional morphology or physiology, there was no difference.

As he wrote in his curriculum, Baccio Baccetti began to regularly frequent the Royal Entomology Station in the heart of Florence in 1941, at the age 10. A young boy in an institute dedicated, since its establishment in 1875, to the study of insects, sitting with his books, his collections and his microscopes in rooms not far from the workplaces of pioneering scientists long hosted and protected by the Medici dynasty in difficult times for those who dared to explore the mechanisms of life.

At just 21 years old, two years before graduating, he had already published in REDIA his first studies on the orthopterans of the Tuscan islands. At 23, he graduated with honours and the publication of his thesis. By 25, he had published 16 papers, mostly in international journals. At 28, he was an Experimenter in Florence's Entomology Station, at 33 Temporary Professor of Human Genetics in the Department of Medicine and Genetics of the Faculty of Sciences of the University of Siena. At 34, he was Full Professor of Biology and General Zoology in the Faculty of Medicine and Temporary Professor of Zoology in the Faculty of Sciences in Siena.

Between 1972 and 1988, he was the Italian Delegate, Vice-President and then President of the Organizing Committee for the International Congress of Entomology. From 1988, he was Director of the Centre for the Study of Germ Cells of the Italian CNR, and from 1995 to 2011, President of the Italian National Academy of Entomology.

Baccetti had a long career with more than 600 scientific publications and incredibly high scores in all types of bibliometric computations today so beloved by accountants of research. We also cannot overlook his participation in the editorial boards of journals such as the Journal of Ultrastructural Molecular Research, International Journal of Insect Morphology and Embryology, Molecular Reproduction and Development, International Journal of Developmental Biology, Tropical Zoology, Animalia, Asian Journal of Zoological Science, Acta Entomologica Bohemoslovaca, and Zygote. He was also a correspondent for



Fig. I – Baccio Baccetti in the “Tribuna di Galileo” at the “Specola Museum”, Florence, during the celebration of the centenary of REDIA Journal in the 2003.

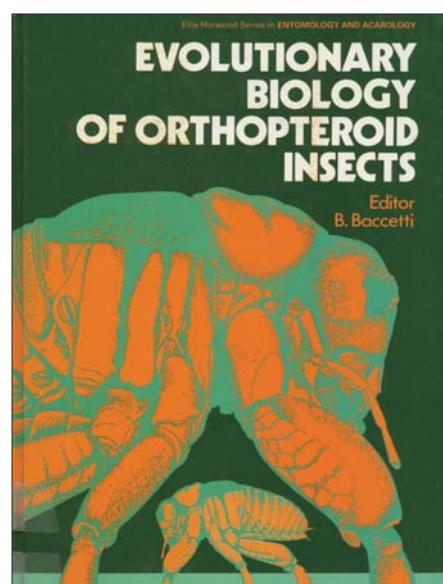


Fig. II – Cover of the book on “Evolutionary biology of Orthopteroid insects” edited by Baccetti in the 1987.

¹ Commemoration held in the Public session of the Italian National Academy of Entomology; Florence, 18 February 2012.

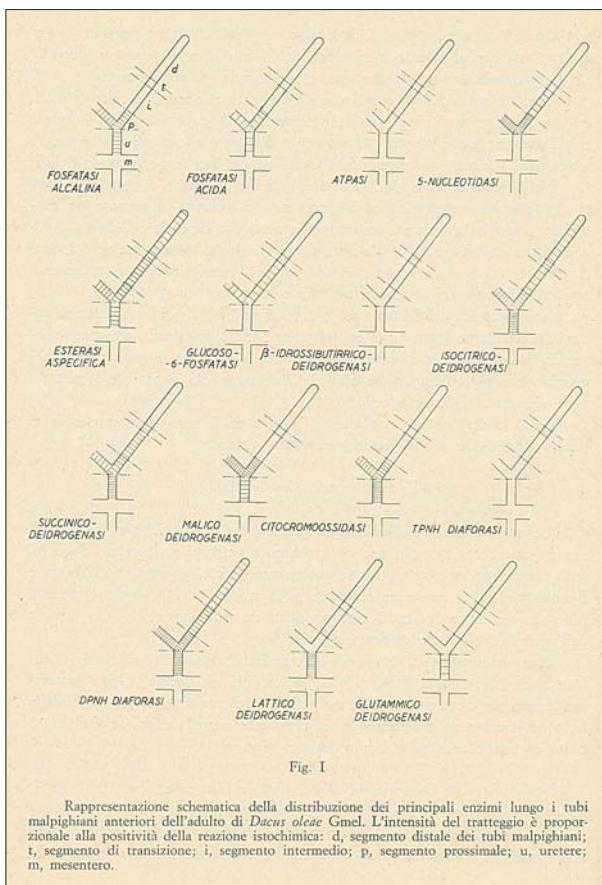


Fig. III – Distribution of enzymatic systems in malpighian tubules of *Bactrocera (Dacus) oleae* (Gmelin) (Baccetti, 1962).

the science pages of the newspapers *La Stampa* of Turin and *Il Giornale* of Milan.

Also of importance is the list of texts published as author or editor: for example, the treatises on General Biology and Zoology, the volumes Biology of Sperm Cells in 1976, Comparative Spermatology in 1970, Evolutionary Biology of Othopteroid Insects in 1987, Comparative Spermatology 20 Years After in 1991. To these we must add the proceedings of international congresses on HIV-related research, a field far removed from what we are used to discussing here, but which helps to illustrate the facility with which Baccetti moved within the Italian scientific panorama.

In 2003, Baccetti agreed to participate in the challenge to revive the journal REDIA on the centenary of its first publication in 1903 by Antonio Berlese, becoming the journal's new Editor. In closing the opening article of the volume of the new series, he wrote: "What I like, after all, is to breathe once again the atmosphere of another adventure, which in research always brings enthusiasm and appeal."

Baccetti was involved in very many research fields, and his contributions to histochemistry cannot be ignored. Indeed, our Academy recently dedicated a day to current studies on Malpighian tubules. In this regard, we should remember the results Baccetti obtained half a century ago with ultrastructural and histochemical investigations of these organs, beginning with the study on the Diaspinae (Baccetti, 1961) and culminating in the definition of the histochemical organization of the Malpighian tubules of larvae and adults of *Dacus oleae* (Mazzi, Baccetti, Massimello, 1962).

The list of Baccetti's fields of research, sometimes very distant from each other, is very long, but he obtained innovative results in all of them: some examples are the studies on collagen in arthropods, the morphology of the eye in arachnids and the ultrastructure of the integument of Tardigrada (Baccetti et al., 1962; Baccetti and Rosati, 1971).

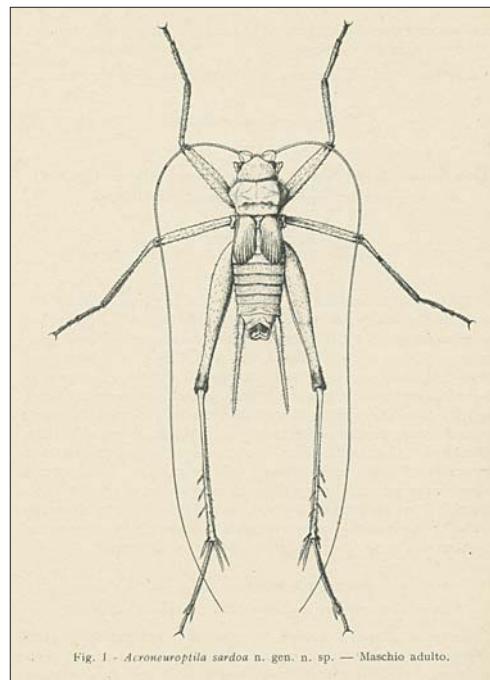


Fig. IV – *Acroneuroptila sardoa* n. gen. n. sp. (Baccetti, 1959).

However, it all began with the study of the Orthoptera, a group Baccetti never abandoned and to which he dedicated all kinds of studies, describing new genera and species. In fact, he continued with research on orthopterans even when his reputation for world-class research on animal and human reproduction might have distracted him completely from a topic to which he undoubtedly gave his time because of his passion as an "entomologist". Baccetti's publications on the Orthoptera alone merit much time and attention, which we do not have available today. However, I wanted to at least mention his work dedicated to cave-dwelling orthopterans.

His was frontline research but he also had the ability to say without mincing words that each new field of study, technique or equipment (even the most advanced) usable for the study of entomology (and not only that) cannot exist without a solid foundation in the traditional sectors. Indeed, Baccetti wrote in the proceedings of the XI Italian Entomology Congress in Portici in his paper "Attualità della faunistica entomologia" ("News of the entomological fauna") "... there is above all the need for a return of the best minds to systematics. This is due to the accurate observation that if systematics dies all of biology dies..." (Baccetti, 1978).

His gaze, from the beginning of his long career, was directed toward the future horizons of basic research, yet he was never indifferent to the problems of the phytosanitary defence of agricultural crops. In this regard, we can remember his 1960 works on the Coleoptera Curculionidae harmful to forage legumes and from the same year the work published with Melis on "Metodi di lotta vecchi e nuovi sperimentati contro i principali fitofagi

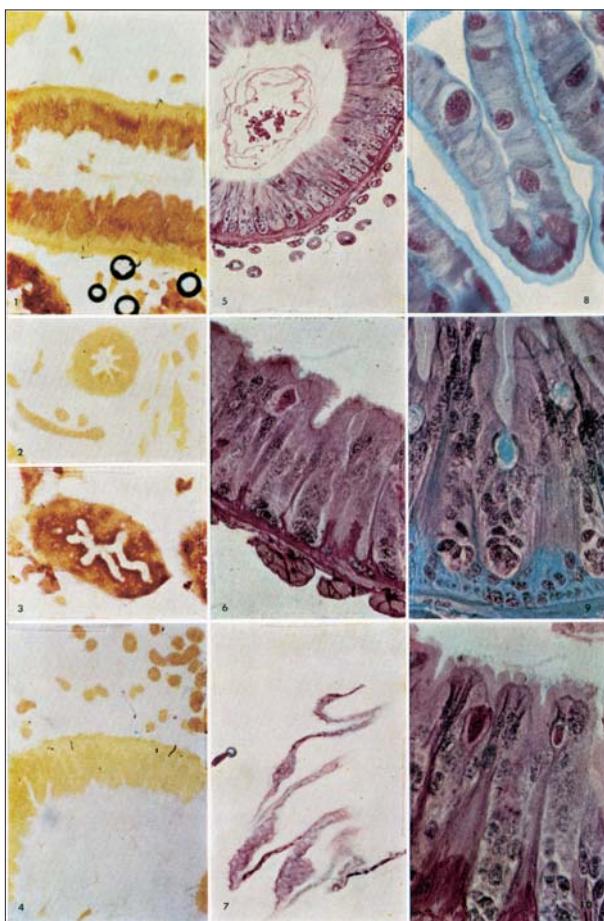


Fig. V – Intestinal epithelium of the grasshopper *Aiolopus strepens* Latr. after treatment with 1-metil N-metilcarbammatte (Baccetti, 1962).

dell'olivo in Toscana" ("Old and new methods of control tested against the main phytophagous pests of olives in Tuscany").

To this research, we must add the studies in the early 1960s on the use of ionizing radiation for the sterilization of insects (Baccetti, 1961; Baccetti, Zocchi, 1962), which were accompanied by investigations on alterations of the intestinal epithelium.

Also belonging to the field of defence against harmful species is a work on the control strategies used against the yellow spider mite of vines "Prove di lotta condotte in Toscana contro ... *Eutetranychus carpi* vitis Dossé" ("Control trials conducted in Tuscany against... *Eutetranychus carpi* vitis Dossé") (Baccetti, Pegazzano, 1961).

Baccetti was also a forest entomologist, able to describe new species in forest ecosystems, as in the case of *Coeliodes solarii* (Baccetti, 1959), or to write comprehensive treatises of entire groups, as for the work "Le cocciniglie italiane delle Cupressacee" ("The Italian scale insects of Cupressaceae"), published in REDIA in 1960, a reference work still used today.

Moreover, we must mention his contribution, in the last period, to the study day organized in 2003 by the Academy of Georgofili dedicated to the evolution of phytosanitary measures (Baccetti, 2003).

This does not mean, however, that he was indifferent to the impact of human activities, as he dedicated one of his last valuable works to the topic "Biodiversità degli insetti e

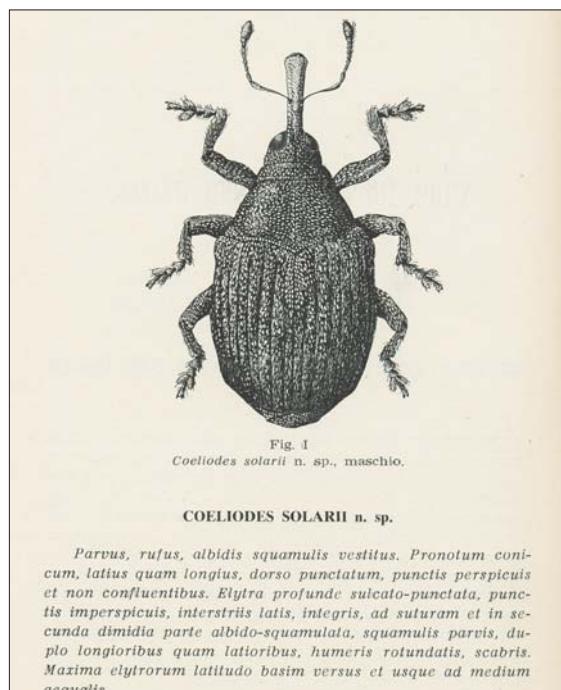


Fig. VI – *Coeliodes solarii* n. sp. (Baccetti, 1959).

sostenibilità ambientale" ("Biodiversity of insects and environmental sustainability") during the Italian Congress in Perugia in 2005; this subject was tackled with his typical ability to communicate amicably with the ancients in order to delineate the paths for the future. Not by chance, at the end of this work, he stressed the importance of cultural biodiversity (called freedom), which is purely phenotypic and desperately defended by man; Baccetti asked us not to forget the lessons deriving from the clumsy attempts by all the worst dictatorships to lay their hands on cultural biodiversity with tragic pseudoscientific experiments (Baccetti, 2005).

He was a consummate scientist and technician, since some of his works were devoted to the perfecting of techniques for the preparation of biological materials (e.g. critical point drying for the conservation of larvae and adults of insects with a soft integument (Baccetti, 1975) and the development of innovative observation methods in the field of electron microscopy.

From such a beginning, was growing up in a normal manner a possibility for a boy who was able to add to the world around him such boundless curiosity and rare insight? These qualities were accompanied by an incredible ease of writing about scientific things, with rare elegance and sometimes with natural and gentle irony, writing equally about anatomy, physiology, academic stories and disputes that were almost obligatory in the role playing that Baccetti encountered as a researcher, teacher and member of many academies and scientific associations.

It is well worth remembering the description he gave of entomologists: "As the class of Insects is among the most specialized and evolved in the animal kingdom, its study has always required special skills and mindsets ... The entomologist has been ..often a pioneer and often outdated, in both cases an unfashionable, lonely, imaginative individual, self-sufficient, easily presumptuous and thus quick to argue."

On the occasion of commemorating Baccio Baccetti, I have the impression of having to tackle one of the toughest jobs I have ever had. Perhaps it would have been easier to concentrate on his brilliant and impressive scientific pro-

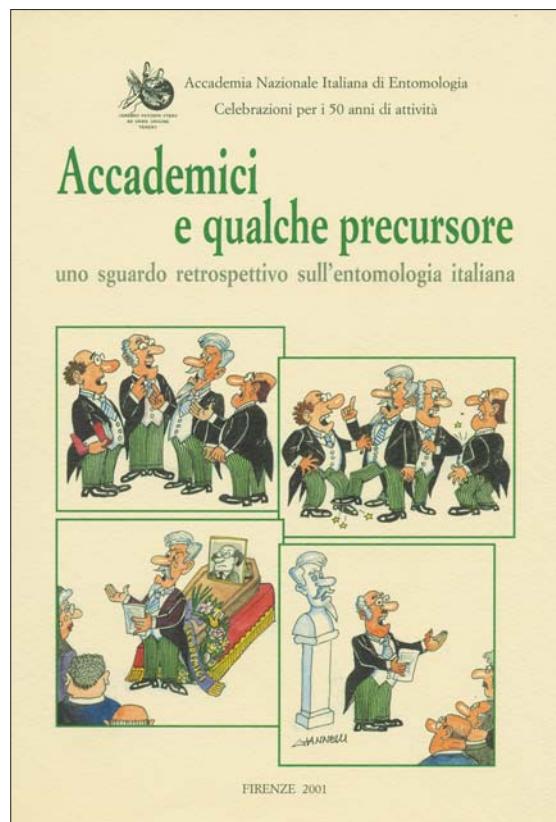


Fig. VII – Cover of the book on “Academics and precursors: a retrospective on the Italian entomology” curated by Baccetti in the 2001.

duction, even mentioning only the invertebrates, but in doing so it would not have been possible for me to fully do justice to him. I would not have been able, probably because of my own limitations, to outline the figure of such an ingenious and brilliant man, one we are rarely privileged to meet in the scientific world. Because of this, when opening my lecture, I wanted to use for Baccetti the words that he used in 1980 to commemorate Emmanuele Padoa, Livornese by birth, who produced biological work of the highest standard in Siena. Concerning Padoa, Baccetti repeated several times to me the following words, “This is the true value of the sciences, and their primary goal: to teach how to think, to teach a growing number of people how to behave as rational beings, freeing them from ancient terrors and from ancient myths, while keeping alive in them, through admiration of the progress achieved, the sense of values, that is, moral judgment, and the desire for more knowledge, which then becomes the need for greater freedom.”

From the 15th century until the recent era, entomology in Tuscany (and zoology in general) has been driven by agricultural and forestry problems, from which derives the weight of applied entomology. That initial period was followed by the fascinating history of the formation of an Entomological School, with an agricultural-forestry stamp, which boasted some of the most glorious names of scientists working throughout six centuries of studies and research.

Baccio Baccetti was a constant erudite and attentive archaeologist of the men whose stories marked the initial and intermediate tracts of Tuscan entomology, always able

to talk about how passion made them become entomologists, even before they were doctors, pharmacists, mathematicians, scientists and men of the church. Concerning what Baccetti’s mind and pen have left, I would like to highlight his patient work (remarkably carried out in some moments of spare time as a researcher) to reconstruct the history of the birth of entomology, giving life to men who set Italy at the heights of global scientific prestige, defying inquisitors and hardships to their life, and of whom very few remembered or had any kind of memory.

Baccio Baccetti began in 1957 by publishing a first work on a 1788 text by Pietro Rossi entitled “Osservazioni insettologiche del sig. Pietro Rossi, Regio Professore nell’Università di Pisa, indirizzate al Sig. Conte Hochenwart, Professore d’Istoria Politica per le AA. RR. Gli Arciduchi Principi di Toscana” (“Insectological observations by Mr. Pietro Rossi, Royal Professor in the University of Pisa, addressed to Count Hochenwart, Professor of Political History for their Royal Highnesses the Archdukes Princes of Tuscany”), for which Baccetti expressed his great surprise at the absence of citations by the major taxonomists. That work contained the first mention of *Bacillus rossius* (sub *Pseudomantis rossia*) (Baccetti, 1957).

Baccetti narrated that, while frequenting La Specola and browsing through FAUNA ETRUSCA, the only book on Tuscan entomology and including splendid colour plates, there arose in him the desire to understand who actually was Rossi, a man he came to consider an imaginary friend. Throughout his high school and university years, he continued to seek Rossi’s date of birth, manuscripts, works and diplomas buried in the lemon-houses of the Boboli Gardens. In 1962, he published the paper “Pietro Rossi naturalista toscano del ’700” (“Pietro Rossi, 18th century Tuscan naturalist”) in which he emphasized the extreme importance of what started “...as a mere catalogue of his entomological collection” but became a highly innovative work on account of three main aspects which Baccetti revealed with great acumen: 1) in the “...descriptions, Rossi uses a practice which no one had adopted before. For species already described, he reports all the diagnoses, or a summary of them, given by the original descriptor and the other authors consulted. Then he publishes his own description, comparing it with the previous ones”; 2) “...while the most famous works of systematics seem to deliberately ignore any chorological and ethological investigation ... Rossi provides details about the dates and locations of collection”, and 3) Rossi adds new details on the etholo-

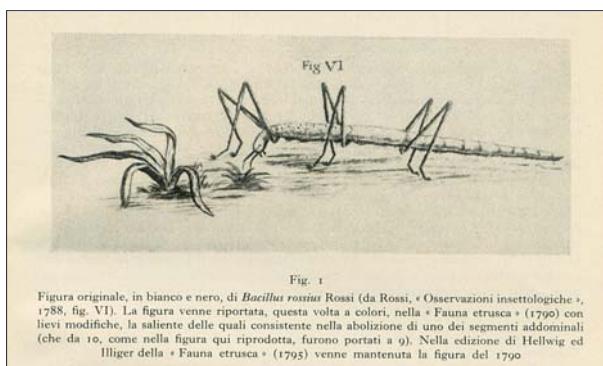


Fig. VI
Figura originale, in bianco e nero, di *Bacillus rossius* Rossi (da Rossi, «Osservazioni insettologiche», 1788, fig. VI). La figura venne riportata, questa volta a colori, nella «Fauna etrusca» (1790) con lievi modifiche, la saliente delle quali consistente nella abolizione di uno dei segmenti addominali (che da 10, come nella figura qui riprodotta, furono portati a 9). Nella edizione di Hellwig ed Illiger della «Fauna etrusca» (1795) venne mantenuta la figura del 1790.

Fig. VIII – Reproduction of the original figure of *Bacillus rossius* Rossi in the work of Baccetti, 1957 “Notulae orthopterologicae. IV. Su un’opera di Pietro Rossi dimenticata dai sistematici e sulla data di descrizione del *Bacillus rossius* Rossi”.

gy of the species, as in the case of *Acherontia atropos*. In the lecture on Pietro Rossi held (together with R. Poggi) in Pisa in 2001 during the celebration of the second centenary of the first chair of entomology in the world, Baccetti wrote that the Tuscan entomologist "... demonstrated the skill of a specialized ethologist" (Baccetti and Poggi, 2001).

After the publication of the first two works by P. Rossi, Baccetti showed a growing interest not only for the history of entomology but especially for entomologists and their personal stories. Indeed, during the celebrations for the 250th anniversary of the Academy of Georgofili, he described entomologists as, "Extravagant characters, driven by an ardent passion for these multiform and multi-coloured animals, which often have a persistent habit of eating the foodstuffs that man has always tried to cultivate and preserve" (Baccetti, 2004).

In 1965, Baccetti recovered and saved the first real entomological text written in the vernacular, the unpublished manuscript "Trattatello di apicoltura del porre i mori e del porre i bigatti" ("Short treatise on beekeeping, on planting mulberries and on keeping silkworms"), datable to the last quarter of the 15th century. Conserved in the National Library of Florence among the palatine codices, it was flooded in 1966 but interpreted, photographed and published by Baccetti a year earlier in the Memoirs of the Italian Association of Entomology (Baccetti, 1965). In his presentation of the anonymous "Short treatise", Baccetti demonstrated, with a careful historical-scientific analysis starting from Aristotle's "History of Animals", that this work filled an almost 200-year gap of silence concerning zoology and represented the "... first embryo of specialized entomological work" in which personal results and experiences were employed (Baccetti, 1965). Perhaps this was the starting point of the "path of Tuscan entomology" and B. Baccetti became its discoverer.

In his publication on "L'Entomologia applicata all'agricoltura nel quadro del movimento accademico in Toscana" ("Entomology applied to agriculture in the context of the academic movement in Tuscany"), Baccetti showed that the "Short treatise" was not followed in 16th century Tuscany by major studies in this field and that the various academies that represented research under the Medici had dealt essentially with the humanities. As Baccetti recalled, Monsignor Giovanni Rucellai (born in Florence in 1475), at that time the best known Tuscan dealing with animals with his poem "The Bees" written in 1524, was also a humanist (Baccetti, 2004). However, Baccetti also recalled that Rucellai was a forerunner of microscopy, enlarging the bees using systems of mirrors.

Apart from other brief references, such as the text "La Coltivazione" ("Cultivation") by Luigi Alamanni published in Florence in 1546, Baccetti strongly emphasized that a true breakthrough only occurred at the turn of the century, thanks to Cosimo III who recalled Galileo Galilei to Florence in 1610; the year before, Galileo had built an apparatus to enlarge very small things and animals, calling it "Occhialino" and giving an example to the Lyncean Academy. As Baccetti wrote in the Memoirs of the Italian Society of Entomology, with this instrument, Galileo became the first scholar "... to put an animal under the microscope, and to describe it, forty years before Robert Hooke saw the first outlines of cells in a plant" (Baccetti, 1992).

Baccetti then underlined the merit of the youngest son of Cosimo II, Leopoldo de' Medici, in having founded the Cimento Academy in 1657, pervaded by the spirit of Galileo. For 10 years, this academy would become the cen-



Fig. IX – Francesco Redi: CRA-ABP collection.

tre of experimental research and discussion "...continuing the spirit and the tradition of the Lynceans after the closure of their academy in 1630". Baccetti wrote in 2004 "...the best fruit of the Cimento Academy... was the physician, scholar and naturalist Francesco Redi (1626-1698), Court Physician of Cosimo III, probably one of the greatest figures to have carried out his activities as a scientist in the field of animal biology". In his writings, Baccetti made it very clear that Redi, whom he called a "great encyclopaedic genius", should be considered the founder of Applied Entomology and Parasitology.

Redi destroyed the superstitions about "SPONTANEOUS GENERATION" by publishing his "Esperienze intorno alla generazione degli Insetti" ("Experiments on

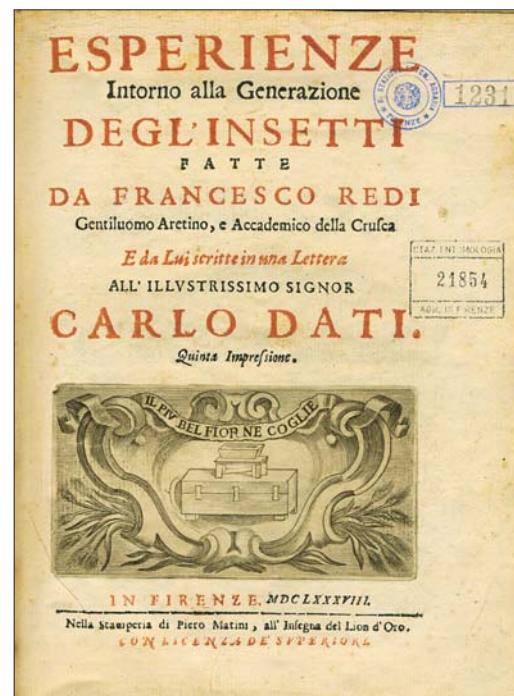


Fig. X – Cover of the book written by Francesco Redi "Esperienze intorno alla generazione degli insetti". Fifth Printing, Florence, Stamperia Piero Matini, all'Insegna del Lion d'Oro, 1688.

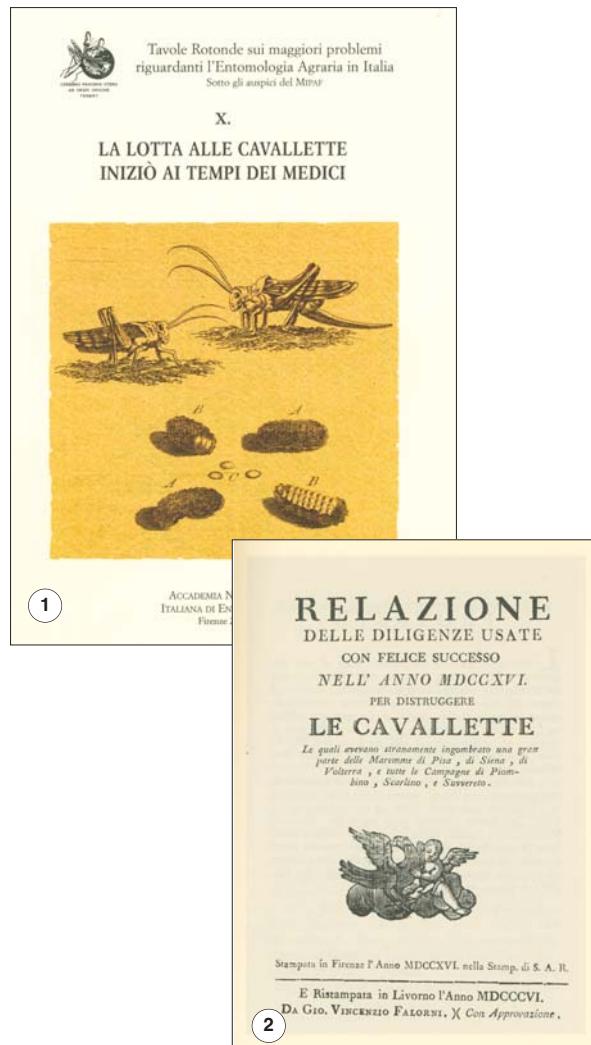


Fig. XI – 1. Cover of the book by Baccetti, Nannelli and Schettini Piazza containing copy of G. Del Papa' manuscript "Relazione delle diligenze usate con felice successo nell'anno MDCCXVI. Per distruggere le cavallette le quali avevano stranamente ingombrato una gran parte delle Maremme di Pisa, di Siena, di Volterra, e tutte le Campagne di Piombino, Scarlino, e Suvereto" (2).

the Generation of Insects") in 1668 and the text "Animali viventi che si trovano negli animali viventi" ("Living animals that are found in living animals") in 1684. Thus, Redi, with the weight of his experimental logic, initiated investigations on the reproduction of insect pests in the fields of medicine and agriculture. This paved the way for studies on the control of mosquitoes and flies, which attracted the attention of many famous entomologists in the later centuries of the last millennium (Baccetti and Nannelli, 2007). Baccetti also deserves credit for having pointed out that Pietro Paolo da Sangallo, Antonio Vallisnieri and Giuseppe del Papa were students of Redi (Baccetti, 2003).

Redi had described how flies, gnats, mosquitoes, grasshoppers, butterflies, mites, scorpions and other animals laid their eggs in environments with well defined characteristics, and how "little vermiform animals" emerged from them, which with successive transformations ended up producing adults identical to those that had laid the eggs. As Baccetti and Nannelli wrote in 2007, P.P. da Sangallo scrupulously undertook the study of the develop-

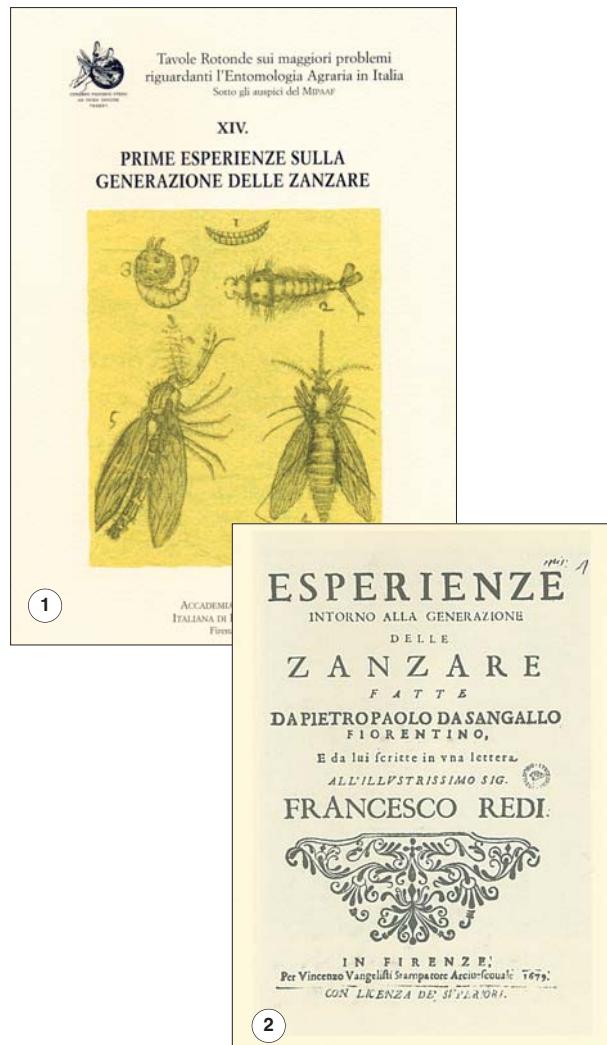


Fig. XII – 1. Cover of the book by Baccetti and Nannelli containing copy of P.P. Sangallo' manuscript "Esperienze intorno alla generazione delle zanzare fatte da Pietro Paolo da Sangallo Fiorentino, e da lui scritte in una lettera all'illusterrissimo sig. Francesco Redi" (2).

ment of mosquitoes, raising them first in tightly closed glass containers and describing the most important stages of their metamorphosis, also with the aid of very carefully made drawings.

The results were collected by da Sangallo in a report in the form of a letter dedicated to the illustrious Mr. Francesco Redi, printed in 1679. The study was resurrected and published in full by Baccetti and Nannelli with an extensive commentary in the publications of the Italian National Academy of Entomology entitled "Tavole rotonde sui maggiori problemi riguardanti l'entomologia agraria in Italia" ("Round tables on the major problems concerning agricultural entomology in Italy"). It is worth mentioning here that Baccetti and Nannelli emphatically reported that da Sangallo had concluded his work by talking about known and possible remedies to protect against mosquitoes, such as oil of wormwood praised by Pliny the Elder, or bathing with wine containing oil of wormwood, or the idea of smearing the face with "...saliva after well chewing cumin, or the use of steeped Ruta..., or dirtying oneself all over with coals of juniper, or filling oneself with

oil, vinegar and crushed sage". da Sangallo concludes "All these ... are totally useless and annoying, and more irritating than the mosquitoes themselves, against which a nice refuge seems to me to be that sole, and unique, one found in ancient times by fishermen of Egypt, that is a good mosquito net which perfectly surrounds the bed, and in our time is made of very delicate Bologna veil...".

Another of Redi's disciples was Antonio Vallisnieri, from Lucca, who devoted himself to the study of various insects. As shown by Baccetti (2003), he carefully related the microscopic morphology of various insects to their habits.

In 2005, Baccetti, together with Nannelli and Schettini Piazza, dedicated another valuable work "La lotta alle cavallette iniziò ai tempi Medici" ("The control of locusts begun in the time of the Medici") to the third of Francesco Redi's students, Monsignor Giuseppe del Papa. The word "locust" had always evoked biblical plagues and Baccetti and co-workers demonstrated the sensibility shown in 1711 by Cosimo III de 'Medici in charging his court physician and family preceptor Del Papa with the task of dealing with the swarms of locusts by studying their reproductive biology, with the ultimate goal of identifying possible defence strategies (Baccetti et al., 2005). Del Papa's text was published in Florence in 1716, but without the name of the author, under the title "Relazione delle diligenze usate con felice successo nell'anno MDCCXVI per distruggere le cavallette le quali avevano stranamente ingombro gran parte delle Maremme di Pisa, di Siena, di Volterra e tutte le campagne di Piombino, Scarlino e Suvereto" ("Report on the diligences used with good success in the year MDCCXVI to destroy the locusts which had strangely encumbered most of the Maremmas of Pisa, Siena, Volterra and all the countrysides of Piombino, Scarlino and Suvereto"). The authorship of the work was attributed to Del Papa only thanks to the praise given by his Roman friend Monsignor Giovanni Bottari. As Baccetti wrote (2005), Del Papa, a very learned prelate and professor of medicine at the University of Pisa, turned out to be a distinguished agricultural entomologist; his comparative-morphological taxonomic studies and ethological research provided the study of the Orthoptera with the first real leap forward since the observations of the scholastics, such as Albertus Magnus, and the little that was written at the end of the 16th century by Aldrovandi.

In the volume on Del Papa, Baccetti also pointed out that the scholar had, with great realism, demonstrated the influence of environmental factors such as drought on the development of locust infestations; his conclusions were also based on experiments he personally conducted, transferring the eggs of these voracious insects from the open field into a hothouse in the Herb Garden of Pisa. As Baccetti recalled, with his experiments and dissections, Del Papa found and rigorously exposed scientific explanations of the reproductive modalities of "locusts", allowing him, a pupil of Redi, to also refute the idea of "spontaneous generation".

Appearing after Del Papa was Pietro Rossi, mentioned at the beginning of this lecture, to whom Baccetti devoted so much energy, drawing from him the initial impetus for his investigations of the men of the history of entomology.

As illustrated by Baccetti in various general publications on zoological studies in Tuscany, what happened next involved figures such as Giorgio Santi, born in Pienza in 1746, who published a good text on the control of locusts in the Val d'Orcia in 1810 (Baccetti, 2004), and Carlo Passerini, who wrote on the olive fruit fly and other pests in 1829. Baccetti recalled that, having arrived at that point, the history of Tuscan entomology continued without any major



events until it intersected with the zoological work of Bettino Ricasoli. After the fall of the House of Lorraine in 1859, Ricasoli, as a passionate naturalist, established the Institute of Advanced Studies in Florence, with a Section for the Natural Sciences and the institution of a Chair of Zoology. In his 1989 work, Baccetti recalled that "After the chair was instituted, it was necessary to fill it, and, as usual, things were done in-house. But for once the practice produced a good result". In fact, Adolfo Targioni Tozzetti (1823-1902), botanist, physicist and chemist, was appointed to the chair, of whom Baccetti wrote "...he established a zoological school destined to become, with various branches, one of the most important in the world" (Baccetti, 1989).

In his writings dedicated to that period, Baccetti described the great fervour of the subsequent years, culminating in the founding of the Italian Entomological Society, in which Targioni Tozzetti, increasingly involved in the then Ministry of Agriculture, was joined by Ferdinando Piccioli and Pietro Stefanelli, as well as various others such as Enrico Hillyer Giglioli and Enrico Benvenuti. The words Baccetti used were "They were wonderful years for Zoology". This was followed by a further enthusiastic statement included in his report to the Georgofili in 2003 on "Evoluzione dei mezzi di difesa fitosanitaria" ("Evolution of phytosanitary measures"), in which Baccetti recalled that Targioni had undertaken the study of scale insects in Italy and in the world and that he had protected the vineyards of Europe by leading the anti-phylloxera movement; moreover, he had ushered in the study of biocoenoses as such and no longer of organisms as isolated entities, impersonating the figure of the modern applied entomologist with a basis of systematics and ethology to be implemented in the development of new strategies for the protection of crops (Baccetti, 2003).

Another event in this period greatly impressed Baccio Baccetti, namely the foundation by Targioni of the Agricultural Entomology Station in Florence in 1875, the first institution of its kind in Europe and probably in the world. Later, the scholar who would become, in the opinion of many, the greatest entomologist and acarologist, Antonio Berlese, was called to continue the research station's

work. Baccetti always had great and unconditional admiration for Berlese, a titanic figure in the Italian scientific landscape and an exceptional illustrator. This can be perceived in his notes dedicated to the great entomologist, a Paduan by birth but to all intents and purposes Tuscan by adoption during the most fertile period of his immense scientific production. This production culminated, in the realm of basic research, in his investigations of metamorphosis and, in that of the applied sciences, in the realization of very important and successful biological control interventions.

Baccio Baccetti later wrote about many other things with his natural elegance of treatment, but it is at this point that my meagre discussion today must end, because I believe that Baccetti gave the best of himself toward the ancients, reconstructing their history by combining their "stories".

In this regard, there remains for me a regret that we were unable to complete a work planned together in the last part of his life, which was to render even more justice to Redi and whose title was already decided, "Francesco Redi e la nascita dell'Entomologia Forestale" ("Francesco Redi and birth of Forest Entomology").

At the conclusion of this lecture, please allow me to thank those present for the opportunity given to the entire former Institute of Agricultural Zoology to commemorate its great researcher. My special and personal thanks go to all of you for allowing me to participate in this moment, giving me the opportunity to send an affectionate public greeting to Baccio Baccetti, the memory of whose friendship I will always conserve with due respect and care.

Farewell Baccio.