

OBITUARY.

PHILIPPE ÉDOUARD LÉON VAN TIEGHEM, Hon. F.R.M.S.
1839-1914.

By A. B. RENDLE, M.A. D.Sc. F.R.S., etc.

By the death of Professor Van Tieghem the Society loses one of its most eminent Fellows, and the science of Botany one of its most devoted and able adherents. Van Tieghem is best known for his work on the comparative anatomy of the flowering plants, many families or smaller groups of which he studied in detail. In 1866 he published in the *Annales des Sciences Naturelles* an important paper on the anatomical structure of the Aroideæ, and a comparison of this family with Typhaceæ and Pandanaceæ, which he regarded as two distinct groups connected by the Aroideæ. In this connexion he writes:—"Nos observations semblent démontrer ainsi par une preuve nouvelle qu'il est indispensable de joindre l'étude anatomique comparée de l'appareil végétatif à celle de la fleur, si l'on veut construire le système idéal à liaisons fixes, qui est l'objet de la méthode naturelle." This was followed by a long and valuable series of papers dealing not only with the vegetative structure of the plant, but also with the comparative structure of the pistil and other parts of the flower, the ovule, and the seed. Perhaps the most fruitful was that entitled "*Anatomie comparée de la fleur femelle et du fruit des Cycadées, des Conifères, et des Gnétacées*,"* in which he attacked the problem of the morphology of the cone-scale from an anatomical point of view. Arguing from the course and orientation of the vascular bundles, he explained the seed-scale as the first leaf of an axillary branch, and demonstrated the existence of a common anatomical plan in the cone-scale throughout the Pinaceæ. In the application of the results of his investigations to a system of classification, Van Tieghem was less successful. He suggested the subdivision of the Angiosperms into three groups, based on the development of the growing-point of the root, as follows:—1. Liorhizeæ Monocotyleæ, including Monocotyledons without the Grasses. 2. Liorhizeæ Dicotyleæ, comprising Grasses and Nymphaeaceæ. 3. Climacorhizeæ or Dicotyledons, including Dicotyledons except Nymphaeaceæ. For further subdivisions he relied primarily on

* *Ann. Sci. Nat.*, ser. 5, x. (1869) pp. 269-304.

characters of the ovule, such as absence or presence of integuments, and their number when present.

In a more recent paper, entitled "The Egg of Plants considered as a basis of Classification,"* he suggested a system of arrangement of the whole plant-world, in which, as before, the details of the structure and development of the ovule are regarded as supplying the most important characters for the subdivision of the groups of Angiosperms. But his system was far too rigid, and indicated a want of appreciation of the relative value of characters: moreover they were hampered by a novel and difficult terminology.

Much of Van Tieghem's work was published in the *Annales des Sciences Naturelles*, in the botanical editorship of which he succeeded Decaisne in 1882, continuing up till the time of his death, and the long series of volumes, rich in the results of his own work and that of his pupils, will form a lasting monument of his services to botanical science. His versatility is shown by several papers of fundamental importance in a very different field, the morphology and physiology of the phycomycetous Fungi. In 1873, with his pupil, G. Le Monnier, he published a lengthy communication entitled "*Recherches sur les Mucorinées*," a monographic account of a little-known group; this was followed by two other papers on the same subject in 1875 and 1876. Among his services to general botany were his *Traité de Botanique*, which appeared in 1884, and in an enlarged edition, containing 1885 pages (1891), and the smaller *Elements de Botanique* (1886-88), which also passed through several editions.

Van Tieghem had been for many years Professor at the Paris Museum of Natural History and a Member of the Institute; he was also one of the most long-standing foreign Members of our own Linnean Society, having been elected in 1885. He was elected to the honorary fellowship of the Royal Microscopical Society in 1879.

* *Ann. Sci. Nat.*, ser. 8, xiv. (1901) pp. 213-390.