

## Analyses d'ouvrages / Book reviews

MAKHOUL É. 2012. — *Les Astragales. À la découverte de la Flore libanaise*. Presses de l'Université Saint-Joseph, Beyrouth, forward by G. & H. Tohmé: 144 p., 275 colour pictures.

ISBN: 9953-455-25-2.

Format: 25.5 × 23.7 cm. Price: 30.40 €.

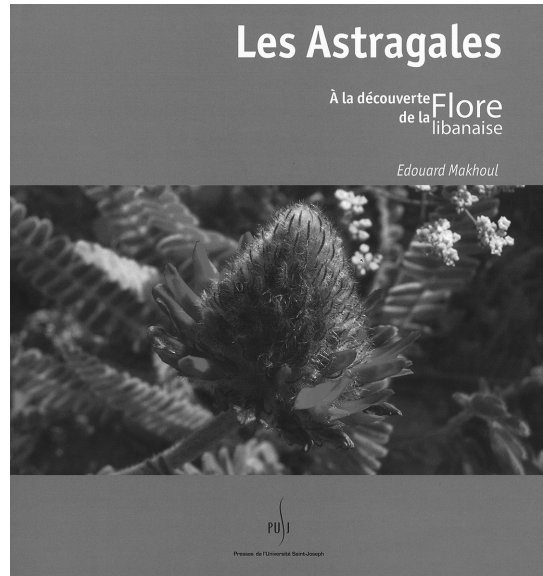
At first sight, the book impresses the reader by its fine quality paper and its hard binding, protected by a beautiful green paper cover.

Its content deals with the taxonomy of *Astragalus* species in Lebanon, written in the French language. Although the author is a dermatologist, and not mastered in botany, the result of his effort in plant taxonomy is worthy of evaluation by researchers in this field of study.

It consists of a preface and a short introduction followed by the main body of book, which includes the descriptions and explanations of *Astragalus* species in Lebanon. It has reported 54 species of the genus in the country. It, then, continues with a two-page glossary, a list of 68 geographical names, which have also been shown on the map with the use of figures, and finally a bibliography, including 18 references.

The book is unique, in particular, with regard to its extremely beautiful and vivid pictures, most of which reveal the shape of the hairs and even their state. All of the pictures show the plants in their natural habitats. In addition to its habit, for each species, pictures have been taken in its different stages of growth, including leaves, flowers, and fruits. These diverse pictures could be very helpful for correct determination of the plants. Some pictures are amazingly nice. One such example could be found on pages 108, 109.

The scientific description of each taxon has been presented in great detail in the French language. It includes a brief explanation of such habits as the height of the plant and so on; the vivid description of leaf features such as stipule, leaflets and so forth; the explanation of the flower characteristics such as calyx, corolla, and inflorescence, etc.; and finally the



description of fruit characteristics. Having presented such a detailed description, the author has, then, provided the reader with the ecological features of the habitat. The distribution of the plant has also been presented in different regions, with special emphasis on Lebanon. In case the plant is the endemic of Lebanon, or Lebanon and Syria, the fact has been mentioned. This has been emphasized with a green rectangle box on the top right side of the page. The last but not the least feature to be mentioned is the presentation of the flowering time of the plants. The number of the pictures taken of each plant ranges from three to nine.

For each species, the caption of the illustrations includes the locations where and the dates when the pictures were taken. This is particularly helpful since it allows the collector to know when to refer to the location to get the plant in its flower form and when to get it in its fruit state. However the pictures were not specified with the name of the species, and references to them are lacking in the text.

In addition to the scientific name for each species its French and English names have been given in all cases. Considering the fact that the book discusses the plants of an Arabic country, it would be much better if the names had been given in Arabic too.

The book covers 267 color pictures; most of which are so beautiful and the close-ups are so informative indeed. One of good and informative is the date of taking pictures and the exact it will helps the collectors for correct collecting time for flowers of fruits for the future collecting.

The species have been arranged in alphabetical order, although a traditional grouping of *Astragalus* species into sections could be much more helpful.

According to International Code of Botanical Nomenclature (McNeill *et al.* 2006), the epithet of each species must start in lower case, however, the author of this book has not followed this general rule.

Scientific names are frequently written in italics, however the author of this book has preferred to use plain letters all through the book.

The descriptions are good in providing details. On occasions, they are even more informative than the original ones.

The shortening of authors' names, as formulated in Brummitt & Powell 1992 and online IPNI website, has not been utilized except for a limited number of cases, as in, for example "Sol." for "Daniel Carl Solander" in p. 30. For example, better and correct name for "Astragalus Aleppicus Boissier" (p. 14) may be *Astragalus aleppicus* Boiss., and "Astragalus platyrhaphus" Fisher (p. 112) may be *Astragalus platyrhaphus* Fisch.

Short author names are frequently given in full, as it has been sometimes practiced in this book, e.g., "Bunge" for *Astragalus ehrenbergii* in p. 62.

The following list includes all the cases where author abbreviating rules of plant taxa have been violated.

M. Bieb.	Beib.;
Boiss.	Boissier;
Bornm.	Bornmuller;
DC.	De Candolle;
Labill.	De La Billardière;
Fisch.	Fisher;
Gaill.	Gaillardot;
Lam.	Lamark;
L.	Linné;
Forssk.	Forsskål.;
Willd.	Willdenow.

Punctuation signs could sometimes be confusing; for example, in this book, the overemployment of a period after the name of the species author may confuse the reader as too whether it is an abbreviating or an ending sign.

In a good number of cases, the scientific names presented in the book are no longer valid, having turned into synonyms. The list of these taxa, together with valid names in italic face letters, is given (based on Podlech & Zarre 2013).

A. Baalbekensis Bornmuller	<i>A. bethlehemiticus</i> Boiss. (p. 20);
A. Cruciatu Link	<i>A. crenatus</i> Schult. (p. 36);
A. Damascenus Boissier	<i>A. campylorhynchus</i> Fisch. & C. A. Mey. (p. 42);
A. Deinacanthus Boissier	<i>A. oleaefolius</i> DC. (p. 44);
A. Dictyocarpus Boissier	<i>A. angulosus</i> DC. (p. 46);
A. Hasbeyanus Boissier	<i>A. oleaefolius</i> DC. (p. 76);
A. Heliopolitanus Mouterde [correctely: <i>A. heliopolitanus</i> (Mouterde) Mouterde]	<i>A. angulosus</i> DC. (p. 80);
A. Hermoneus Boissier	<i>A. angustifolius</i> Lam. (p. 82);
A. Hirsutissimus De Candolle	<i>A. lanatus</i> Labill. (p. 84);
A. Lepidanthus Boissier	<i>A. bethlehemiticus</i> Boiss. (p. 94);
A. Pinetorium Boissier	<i>A. pinetorum</i> Boiss. (p. 110);
A. Platyraphis Fischer [correctly Fisch. in schedis]	<i>A. caprinus</i> L. (p. 112);
A. Sofayensis Thiébaud	<i>A. oleaefolius</i> DC. (p. 120);
A. Spinosus Forsskål.	<i>A. spinosus</i> (Forssk.) Muschler (p. 122);
A. Trichopterus Boissier	<i>A. nummularius</i> subsp. <i>trichopterus</i> (Boiss.) Thiébaud (p. 130).

Finally, I would like to offer gratitude to Dr. Thierry Deroin, who provided me with the opportunity to review this noteworthy book in my field of interest.

Farrokh Ghahremaninejad  
Department of Plant Biology,  
Faculty of Biological Sciences,  
Kharazmi University, Tehran, Iran.  
ghahremaninejad@khu.ac.ir

## REFERENCES

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Museum Wien-Austria: 3 volumes, 2439 p.  
BRUMMITT R. K. & POWELL C. E. 1992. — *Authors of plant names*. RBG, Kew, Kent.

MCNEILL J. et al. 2006. — *International Code of Botanical Nomenclature* (Vienna Code). Regnum Vegetabile.

HERVÉ M. & POINSOT D. 2013. — *L'Évolution des espèces*. 1. Les preuves; 2. Les mécanismes. Collection « Espace des sciences – Nature ». Éditions Apogée, Rennes: vol. 1, 63 p., 42 figs; vol. 2, 63 p., 44 figs.

ISBN : vol. 1, 978-2-84398-436-5;  
vol. 2, 978-2-84398-437-2.

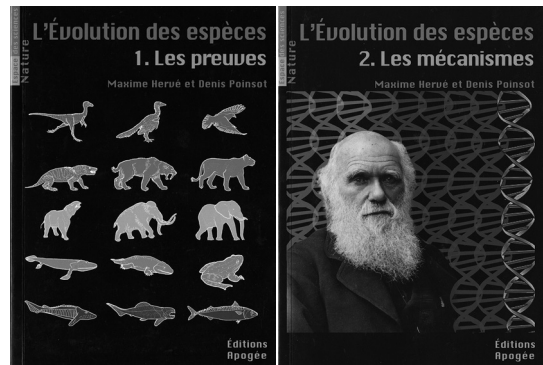
Format : 19 × 14 cm. Prix : 19,60 €.

Tout comme Charles Darwin, Maxime Hervé, doctorant en écologie des interactions plantes-insectes, et Denis Poinsot, maître de conférences en biologie animale à l'Université de Reims, se sont intéressés à l'évolution des espèces.

Ces auteurs traitent, dans deux livres de vulgarisation scientifique au format pratique (petits et fins), cette question centrale de la biologie avec beaucoup d'humour, tout en respectant la démarche scientifique : établissement des faits, formulation des questions et proposition d'explications. Nous entrons dans le vif du sujet (tome 1, p. 5) par une journée dans la peau des éphémères qui « nous rappelle qu'un phénomène trop lent échappe à nos sens ». Cette mise en situation nous fait bien voir l'importance d'envisager le monde dans son ensemble et dans la durée afin de comprendre l'évolution.

Dans un premier volume, *Les preuves*, nous remontons le temps à la rencontre des espèces tant animales que végétales, depuis notre époque jusqu'au précambrien, et les divergences morphologiques croissantes constatées sont l'occasion de formuler des hypothèses explicatives de plus en plus précises. Cette approche paléontologique est prolongée par l'étude de quelques questions d'anatomie comparée.

Dans un second volume, *Les mécanismes*, les auteurs nous expliquent grâce à la génétique comment se déroule cette évolution, en insistant notamment sur la sélection naturelle. Des schémas simples illustrent les mécanismes génétiques intervenant dans l'évolution, que ce soit à l'échelle des différentes générations (fig. 4, p. 9 et fig. 8, p. 13) ou à celle des gènes (p. 19) et des chromosomes (p. 32, 33).



Notons enfin que le champ de recherche du premier auteur a conduit à une bonne prise en compte des interactions entre espèces.

Une nouvelle fois, on peut déplorer la quasi-absence – assez classique dans ce type d'exposé – de plantes et de champignons dans les exemples cités, alors qu'ils auraient justement pu, entre autres – introduire la notion d'évolution parallèle liée aux symbioses et au parasitisme notamment.

Ces deux petits livres sont néanmoins un excellent résumé accessible à tout public, et d'une réelle valeur pédagogique, car un nombre réduit de notions fondamentales y est abordé, mais de la façon la plus rigoureuse possible. C'est pourquoi ils peuvent rendre service aux lycéens, et même aux étudiants de biologie de première année universitaire. De nombreuses illustrations complètent de façon très appropriée les exemples choisis à la fois dans le répertoire classique (par exemple, le retour à la mer des cétacés et l'évolution des membres des Équidés, tome 1, p. 21-24 et 30 ou la dérive génétique, tome 2, p. 43) et dans les travaux contemporains (par exemple, l'évolution de la lignée humaine, tome 1, p. 52-61 et la spéciation péripatrique, tome 2, p. 49), afin de mieux souligner les caractéristiques essentielles de l'évolution des espèces.

Marie Bouissière

POPIELA A., POREMSKI S., SCHIEFELBEIN U., TANNEBERGER F. & WIECZOREK A. (eds) 2011. — Flora, Vegetation and Landscape of Pomerania. *Plant Diversity and Evolution* 129 (3-4): 118 p., 37 figs, 11 tables, 1 appendix.

TANNEBERGER F., POPIELA A., HÜBENER T., RINGEL H. & SCHIEFELBEIN U. (eds.) 2013. — Flora, Vegetation and Landscape of Pomerania 2. *Plant Diversity and Evolution* 130 (3-4): 131 p., 51 figs, 20 tables, 3 appendices.

ISSN: 1869-6155.

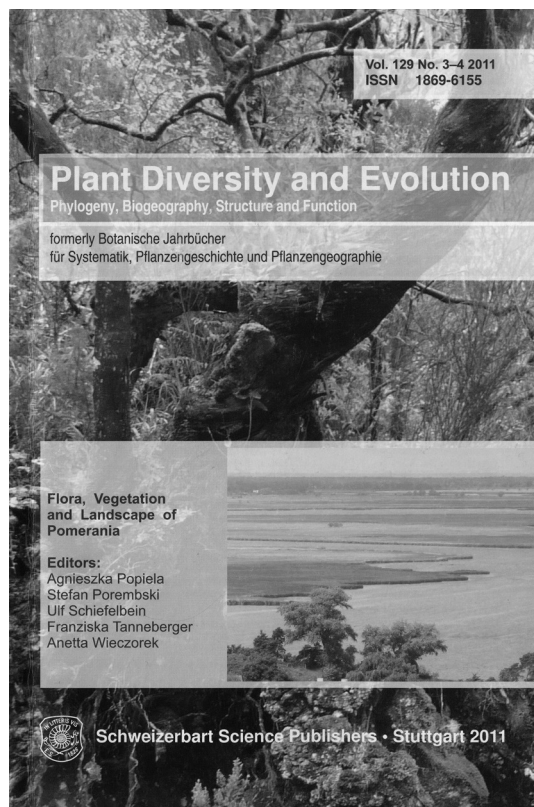
Format: 24 × 16 cm. Price: \$78.

These thematic issues of the renowned review *Plant Diversity and Evolution* (formerly *Botanische Jahrbücher*) gather 23 papers together, from Polish and German authors, surveying different aspects in the floristic and landscape ecology of Pomerania, a Baltic province whose the eventful last 70 years caused irreversible changes in population – especially farming one – leading to deep environmental alterations. They originated from a first revival symposium on “Flora, Vegetation and Landscape in Pomerania”, held in September 2007 at Szczecin, Poland.

Despite the apparent scattering of papers, dealing mainly with fungi, lichens and plants (but excluding algae), the authors concern for generalization of their results is obvious.

An unexpected and puzzling insight is yielded in the concluding paper of the first volume by Herbichowa & Herbich, who compared the impact of protection on the vegetation changes in four reserves leading either to a restoration of a typical vegetation much faster than planned (Staniszewskie Błoto Reserve), or conversely to a damage, due to an eutrophication by migrating birds such as cranes – *Grus grus* – (Białogóra Reserve). So both landscape maintenance and preservation of threatened taxa may be get only by an accurate knowledge of the unsettled “*Œconomia Naturae*”, already suspected by Linnaeus as soon as 1749 along the northern coasts of the Baltic sea, thus allowing efficient and subtle interventions.

The number of the cited references is to be appreciated, considering the long floristical and phytosociological tradition in eastern Europe. A historical study is anyway tackled for the North-West Poland by M. Ziarnek in the second volume. Nevertheless comparisons might be usefully broadened to similar landscapes recognized near the northwestern coasts of our continent. Especially the same pattern of marshes, sometimes including some



halophytes, and often subject to peculiar farming practices too, occurs in France (Brittany, Normandy, e.g., southern Cotentin, see the phytosociological works by the late Prof. J.-M. Géhu, as well as those of Michel Provost), and indeed in England, Wales, Scotland and Ireland, all places which might be connected, at least loosely, by bird migrations.

Thus these special issues are a nice and many faceted introduction to concrete and even experimental ecology applied to the maintenance and restoration of natural environments, and may be of interest for a very wide readership. They encompass so many fields that they suggest much innovative tricks in plant ecology. They provide too a fine editorial model which might be applied to similar programs in Europe, and probably outside.

Moreover the most demonstrative cases should be fruitfully set out in school textbooks, fully illustrating the agreement between ecological and mere economical concerns, a major challenge for our century.

Thierry Deroin