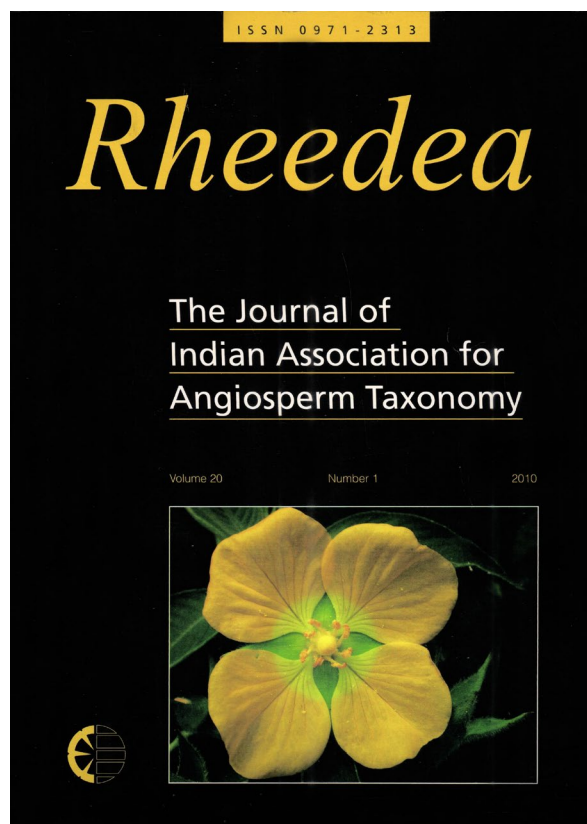




Book Review: Know Your Grass Genera Through Hand Lens

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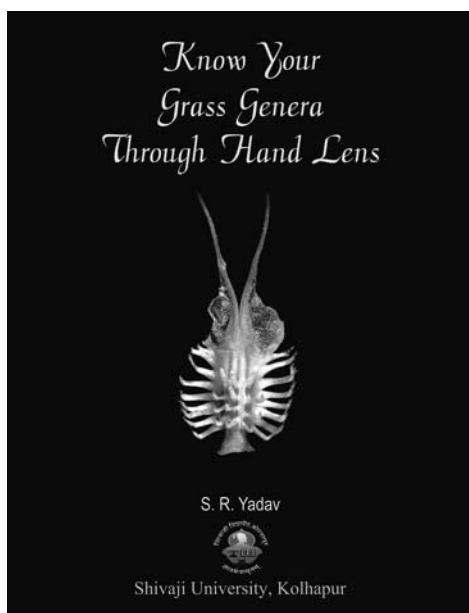
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Book Review

S.R. Yadav 2010

Know Your Grass Genera Through Hand Lens, Shivaji University, Kolhapur. I – xxiii +92pp., about 120 line drawings, 6 plates, more than 350 photographs.

ISBN 978-81-8486-331-4, Price Rs. 500/-



Identification of grasses is often considered difficult due to various reasons. The present book, *Know Your Grass Genera Through Hand Lens* edited by S.R. Yadav and with contributions from six other scientists of the Botany department of various institutions including Shivaji University, Kolhapur, aims at solving this problem to some extent by familiarising and popularising grass taxonomy among botanists, amateurs and others. It deals with the grass genera available in the Maharashtra state.

The brief introductory chapter clearly brings out the economic importance of the group. It is mentioned here that sugarcane which is the main raw material for sugar production is also used now-a-days for manufacturing bio-alcohol and that the bio-alcohol – petrol mixture is extensively used as auto-fuel in some countries like Brazil and USA. It is worth mentioning here that grasses have become extremely important these days because of the newly developed technology for producing bio-alcohol from their cellulosic biomass. In this method, the cellulosic biomass of grasses is converted to sugar and

this sugar is used for the production of bio-alcohol in the conventional way. Thus any grass is a potential bio-alcohol producer. Many hectares of wastelands in Mexico have been converted to plantations of the North American endemic grass, *Panicum virgatum* L. and commercial production of bio-alcohol from this grass has already been initiated. The Elephant or Napier grass, *Pennisetum purpureum* Schumach. and species of *Miscanthus* Andersson are now extensively used for this purpose in the UK

Yadav concludes the introductory chapter by listing various aspects of grasses that need further studies. Probably, detailed investigations on the bio-alcohol production potential of various grasses of our country is another most important aspect of study that has to be added to this list.

The chapter on morphology of grasses deals with the subject in a very lucid manner supported by very good line drawings. This account will help the reader to understand the group in a much better way so that the key given in the main part of the book can be used without any difficulty.

Bor's (*Grasses of Burma, Ceylon, India and Pakistan*) classification is followed in the book even though better classifications are available now. Similarly the keys given by Bor are also faithfully followed here. Prof. Yadav and his associates are known to have studied the grass flora of Maharashtra in detail and as such it was felt that they could have attempted to write a new and more authentic key based on their own observations. The main highlight of the book is the life-like photographs of representative species of the genera involved at appropriate places. Prof. Yadav is well known for his expertise in microphotography of plants and deserves all appreciation for the excellent images presented in the book. The present reviewer, however, has some reservations about the captions (generic names) given for these photographs. Various species of a genus are highly variable and therefore one cannot photograph a genus as such but can only take the

pictures of various species of that genus. The following two examples may probably illustrate this point:

- (i) The illustration given under the caption *Urochloa* shows the fertile lemma with an obtuse apex and abruptly arising awn. In the Indian species of this genus this character is found only in *Urochloa panicoides* P. Beauv. As the author is following a *sensu lato* concept of this genus with many species of *Brachiaria* Griseb. sunk under it, in the other species of his *Urochloa* P. Beauv. the apex of fertile lemma is mucronate to awned and more or less acute.
- (ii) On page 13 the picture of *Ischaemum* L. given shows clear transverse furrows on the lower glume. It is known that *Ischaemum* L. has some

infrageneric taxa with smooth lower glume and even in the species with typically rugose lower glume, the degree of rugosity is highly variable.

Probably, by giving the complete names of the plants as has been done in plates 2 – 6 of the book this problem could have been solved.

The present book also gives other important informations on the genera involved, like etymology, number of species in the world and India and data on distribution.

This is a very useful book with very clear and excellent photographs.

V.J. Nair
(Coimbatore)

Obituary

Harry W.E. van Bruggen



Harry W.E. van Bruggen passed away on 8th February 2010. He was 82.

Harry W.E. van Bruggen was born on 6th December 1927 in Amsterdam, The Netherlands. As a young child he was very much interested in nature. Bruggen's vast knowledge of Biology was mainly self-taught.

At the end of the fifties Harry van Bruggen bought an *Aponogeton* plant that he could not identify; the species was not known until then by any name. He described it as *A. rigidifolius* H. Bruggen with the help of Professor De Wit. Since then he developed a keen interest in *Aponogeton* and spent much of his spare time on this subject. His interest on *Aponogeton* culminated with a monograph on the genus published in 1985. He has to his credit 13 new species of *Aponogeton*. An Indian species, *A. bruggenii* S.R. Yadav *et* Govekar has been named in honour of him for his immense contribution to the Aponogetonaceae. In spite of his illness during old age he continued his studies on aquatic plants as much as he could. Not only had he written on botanical subjects, but also did voluntary work for botanical societies. He served as a member of the editorial staff of 'Aqua Planta' and 'Het Aquarium'.

His last work was the compilation of illustrious database on *Aponogeton*, digitization and web hosting. Although the work got over by the end of 2009, it is yet to be launched online.

Rheede mourns the demise of this meticulous Taxonomist.

S.R. Yadav
(Kolhapur)