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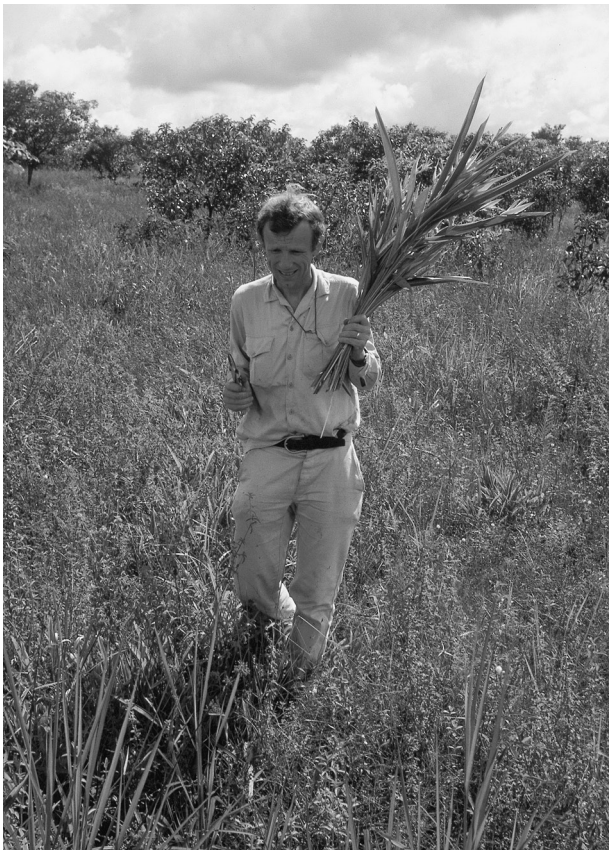
ON THE RETIREMENT OF PAUL MAAS

As a teenager at Highschool Paul Maas initially had decided that he would study chemistry. However, born into an intellectual family as the youngest of five brothers, he had the advantage of receiving many different kinds of stimuli. So, among others, he joined his brother Frans, a student at the Agricultural University in Wageningen, who made an inventory of the vegetation along brooks of spring waters near their parental home in Arnhem. This may well have been the trigger for what followed!

In 1957, Paul started his study in biology at Utrecht University. The subjects he studied for his MSc degree included plant systematics, ecology, but also chemical endocrinology, and biochemistry. In 1964, he joined Dr. Peter A. Florschütz for four



Paul Maas collecting *Heliconia* in Trinidad, on his return after the trip to Guyana, 1979. Photo courtesy of L.Y.Th. Westra.

months on a botanical exploration journey into Suriname to conduct an inventory of the Bakhuis Mountains. This was followed by ecological forest research in Western Suriname by Paul and the tree plotters J. Tawjoeran and R. Elburg, again for a period of four months. This fieldwork in Suriname made him definitely settle down to botany. His appointment as a staff member at the Institute of Systematic Botany of the Utrecht University in 1965 enabled him to respond fully to this interest. From then on and up to the present he travelled widely throughout tropical America. He collected in all countries of the Neotropics from Mexico southward, excepting only Guatemala, Nicaragua, and Belize. Furthermore, he searched for remnants of tropical forest on the Greater Antilles and other Caribbean islands. Initially, during each trip he made large general collections, but later on he became focused primarily on those plant families that are actually under study in Utrecht.

Legend has it that the plant labelled '*Maas 1*' was collected during his honeymoon. Although this is not the true story (the real specimen dates back to an earlier time), it is understandable that it is so persistent, as Paul's wife Hiltje is often actively involved in his work. One should, in this context, not just think of the regular collecting trips only. Interesting plants are spotted and collected everywhere, be it on airstrips waiting for an airplane to bring botanists back to civilisation, or during family holidays. Paul also contributed as a co-collector to the numbering series of many other botanists. We should name here in particular the numerous collections in the Prance numbering series, made in Brazil in 1971. But let us restrict ourselves now to Maas's own series which, at this writing, goes up to nearly 10,000 numbers. From his field-books, all meticulously kept up-to-date, one can glean the following data (all approximately):

- Maas travelled in 20 tropical American countries, often visiting them more than once. Brazil and Guyana bore the palm: there he went 8 times and 6 times, respectively. He always strove to collect 6–12 duplicate sets to each number. About half of those were deposited in local herbaria, while others were intended for specialists. As part of the normal procedure, and with circumstances permitting, numerous photographs of the plants in vivo were taken, additional material was collected in spirit, and samples for the Utrecht wood collection were gathered. During the last decade, as a matter of course, also leaf material dried on silica gel was brought home, to be used for molecular systematic studies. In all field-books one can find a list of desiderata asked for by colleagues from all over the world.
- A total of, roughly, 90 colleagues and students accompanied Paul on his trips at one time or another. Most of the students were undergraduate students at Utrecht University doing fieldwork as part of their MSc or PhD program. The others form a mixed assembly from all over the world. And there is, of course, the very important role played by his wife Hiltje, as already indicated above.
- More than 40 new species are based on type collections by Maas et al.

Whenever possible, collecting trips were combined with visits to local herbaria. That usually meant hard working for Paul and whoever accompanied him. At the end the herbarium curator would invariably find a large pile of identified material, mostly to species. It goes without saying that Paul's visits contributed much to the enhanced value and usefulness of the herbarium collections.

Most of the time, however, Paul was in Utrecht, teaching or doing taxonomical research. For his PhD thesis (with Professor J. Lanjouw) he revised the Costoideae (Zingiberaceae; later elevated to family rank as Costaceae). This revision was his first contribution to Flora Neotropica (1972). A few years later, the taxonomic research on 'saprophytes' was started in close cooperation with many graduate students and colleagues. This resulted in the publication in 1986 of three Flora Neotropica monographs (Triuridaceae, Gentianaceae, and Burmanniaceae).

In 1983, the decision was made in Utrecht to concentrate systematic research on the pantropical family Annonaceae, with main focus on the Neotropics. Since then, research on monocots and saprophytes was continued in spare time, in close cooperation with Hiltje. Paul increasingly had to devote his time to organising and managing the multidisciplinary Annonaceae-project. Already in that same year, 1983, a synoptical key to the Neotropical genera was published as an internal document. A follow-up on this was published in 1990, comprising a critical discussion of morphological characters in relation to various classifications of Annonaceae. In 1987, 1990, and 1994, extensive indices to genera, species and intraspecific taxa became available. In 1985, the first, preliminary, edition of the Bibliography of Annonaceae was prepared under the editorship of E.A. Mennega. Meanwhile, taxonomic research went on. The first revision, of *Anaxagorea,* was published in 1984–1985. The next ones, perhaps even more extensive, are those of *Rollinia* (1992) and, most recently, *Duguetia* and *Pseudoxandra* (both 2003). Besides, there appeared many shorter papers, e.g. precursors and additions, descriptions of new species, and travel reports with lists of identifications. Soon, specialists and students of most well-known institutes from all over the world started to participate in one way or another. The seven Annonaceae-workshops, held between 1984 and 2002, formed the platform to discuss and to plan future research. Paul's ability to stir other people's enthusiasm becomes obvious from many of his publications: since the start of the Annonaceae-project, nearly all manuscripts were prepared in close cooperation with colleagues and students.

After he had taken over the formal leadership of the research group in Utrecht in 1990, he soon became also involved in the 'Flora of the Guianas'-project after the retirement of Professor A.L. Stoffers. This can only have stimulated his interest in plant identification and nomenclature. Alone or with others, he described c. 250 new taxa. Well known is his part in the search for the identity of 'Unknown-Z'. This enigmatic plant for many decades was only known by this peculiar name. In 1991, during a lunch break, a good flowering collection was made in the Mabura region in Guyana (*Polak, Maas, et al. 510*), and now it could be recognized as a member of Olacaceae. Maas, together with 6 co-authors, published it in 1992 as a new genus giving it the apt name *Maburea*.

Worth mentioning are the subsequent editions of 'Neotropical Plant Families' – on the border between research and education. The first version (in Dutch, with slightly different title; 1987) was intended for Dutch MSc students as a manual for the course on Neotropical Flora, given for the first time in that year. A few years later the interest in this course from many colleagues and students from abroad, in particular from Latin America, made him change the course language to English. As a consequence the manual was translated by Maas & Westra and there appeared improved and enlarged

printed editions – published by Koeltz, Germany – not only in English (1993), but also in Spanish (1998). The next edition, ready to go to press, is based on APG-I and APG-II. Thanks to these teaching activities, as well as to his travels, Paul gradually built up a large international network. As a spin-off, numerous foreign students and specialists came to spend a shorter or longer time working in the Utrecht herbarium.

When, in 1994, Paul was called to a professorship he at first hesitated, knowing what the consequences would be. He accepted the position, however, being fully aware of the vital interest of the group. Since then, his role as primus inter pares has made the group flourish. Mainly due to Paul's friendly personality, the small staff is also assisted by a group of active honorary staff members, most of them formally retired already for a number of years.

The extraordinary professorship enabled Paul to supervise PhD projects. He was member of the advisory committee of several PhD students in the Netherlands and abroad, and acted as principal advisor of eight PhD students in Utrecht: Van Zuilen, He, Chatrou, and Van Andel, and the ongoing projects of Pirie, Erkens, Bankí, and Haripersaud. Paul's eagerness to collaborate was reflected in the various disciplines that were represented in the advisory committees of his students, enabling them to be broadly trained and to keep track of recent developments in plant systematics. Palynology, secondary plant chemistry, DNA sequence data, phenetics, phylogenetic systematics: whatever the type of data or the methods of analysis that were applied, Paul encouraged PhD projects to be firmly rooted in taxonomic knowledge, preferably acquired through fieldwork.

In the course of Paul's career, several taxa have been named after him. These include:

Aechmea maasii Gouda & W. Till (Bromeliaceae, 1997)
Besleria maasii Wiehler (Gesneriaceae, 1978)
Brachystele maasii Szlach. (Orchidaceae, 1996)
Calathea maasiorum H. Kenn. (Marantaceae, 1995)
Cynanchum maasii Morillo (Apocynaceae, 1995)
Habranthus maasii Ravenna (Amaryllidaceae, 1978)
Ilex maasiana Loizeau & Spichiger (Aquifoliaceae, 1994)
Mosannona Chatrou (Annonaceae, 1998)
Ouratea maasorum Sastre (Ochnaceae, 1986)
Sarcoglottis maasorum Pabst (Orchidaceae, 1979)
Solenocentrum maasii Dressler (Orchidaceae, 1998)
Stemmadenia pauli Leeuwenberg (Apocynaceae, 1994)

Although Paul never made it a secret that administration and management were not among his prime interests, he was an active member of the management team of the National Herbarium of the Netherlands. Likewise he committed himself to many other organisational tasks directly related to plant systematics.

The start of the National Herbarium of the Netherlands (Nationaal Herbarium Nederland) as a joint venture of the three major Dutch herbaria, five years ago, has been the most important change and stimulus for plant systematic research in the Netherlands

in the last decades. Although housed decentrally in the original locations at the Universities of Leiden, Utrecht and Wageningen, the NHN has proven to be viable. Most unfortunately, the survival of the NHN is now threatened by recent plans of the Faculty of Biology at Utrecht University, prompted by budget cuts, to put an end to research in plant systematics and close down the Utrecht research facilities. This intention, issuing from financial problems experienced by the Dutch government due to the bad state of current economy, fails to do justice to the innovative quality of the research done by the group, and also completely goes by their potential to contribute to biodiversity studies.

For all colleagues it is obvious that Paul's interest in plants will not be gone with his retirement, and that he looks forward to join the group of honorary staff members. Let us hope that it will be allowed him to continue work on plants, which he loves so much.

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JIFKE KOEK-NOORMAN

LIST OF PUBLICATIONS

1971

Maas, P.J.M. Costoideae de Venezuela. Revista de la Facultad de Farmacia (Universidad de Los Andes, Merida) 8: 89–109.
Maas, P.J.M. Floristic observations on forest types in Western Suriname. Proc. Kon. Ned. Akad. Wetensch. 74: 269–302.
Segeren, W. & P.J.M. Maas. The genus Canna in Northern South America. Acta Bot. Neerl. 20: 663–680.

1972

Maas, P.J.M. Costoideae (Zingiberaceae). Flora Neotropica 8: 1–140.

1975

Maas, P.J.M. Notes on New World Zingiberaceae. I. Acta Bot. Neerl. 24: 469–480.

1976

Maas, P.J.M. Wetenswaardigheden over Zingiberaceae. I. Wachendorffia 4: 32–36.
Maas, P.J.M. Wetenswaardigheden over Zingiberaceae. II. Wachendorffia 4: 42–46.
Maas, P.J.M. Zingiberaceae. Flora of Ecuador 6: 1–50.

1977

Maas, P.J.M. Renealmia (Zingiberaceae, Zingiberoideae) and Costoideae (Zingiberaceae). Additions. Flora Neotropica 18: 1–218.
Maas, P.J.M. Wetenswaardigheden over Zingiberaceae. III. Wachendorffia 5: 42–45.
Maas, P.J.M. Wetenswaardigheden over Zingiberaceae. IV. Wachendorffia 5: 62–65.

1978

Maas, P.J.M. Notes on New World Zingiberaceae. II. Acta Bot. Neerl. 28: 90.
Maas, P.J.M. A new Heliconia (Musaceae) from Suriname. Acta Bot. Neerl. 28: 91–92.
Maas, P.J.M. Zingiberaceae. Flora of the Lesser Antilles 3: 524–539.
Maas, P.J.M. Cannaceae. Flora of the Lesser Antilles 3: 539–542.
Snelders, H.C.M. & P.J.M. Maas. Burmanniaceae. Flora of the Lesser Antilles 3: 550–554.

1979

Maas, P.J.M. Notes on New World Saprophytes. I. Acta Bot. Neerl. 28: 89.
Maas, P.J.M. Notes on New World Zingiberaceae. II. Acta Bot. Neerl. 28: 90.
Maas, P.J.M. Notes on Asiatic and Australian Costoideae (Zingiberaceae). Blumea 25: 543–549.
Maas, P.J.M. Neotropical Saprophytes. In: K. Larsen & L.B. Holm-Nielsen (eds.), Tropical Botany: 65–370. Academic Press, London, New York, San Francisco.
Maas, P.J.M. & M.J.M. de Rooij. Musaceae. Flora of Suriname 5, 1: 393–411.
Maas, P.J.M. Cannaceae. Flora of Suriname 5, 1: 412–415.
Maas, P.J.M. Zingiberaceae. Flora of Suriname 5, 1: 416–441.
Rypkema, H.R., C.C. Berg & P.J.M. Maas. Flora Neotropica. Base Maps. No. 1–3.

1981

Maas, P.J.M. Notes on New World Saprophytes. II. Acta Bot. Neerl. 30: 139–149.
Maas, P.J.M. Saprophyten in tropisch Amerika. Wachendorffia 7: 36–44.
Maas, P.J.M. Gentianaceae. Flora of the Netherlands Antilles 2: 299–301.

1982

Maas, P.J.M. Zingiberaceae. Flora de Venezuela 11, 2: 205–256.
Maas, P.J.M. On the true identity of Lagenanthus parviflorus Ewan (Gentianaceae). Ann. Missouri Bot. Gard. 68: 685–686.

1983

Cobb, L. & P.J.M. Maas. Seed coat micromorphology in Irlbachia (Gentianaceae). Proc. Kon. Ned. Akad. Wetensch., Ser. C, 86: 127–136.
Maas, P.J.M. & H. Maas-van de Kamer. Notes on Asiatic Costoideae (Zingiberaceae). II. A new Costus from Celebes. Notes Roy. Bot. Gard. Edinburgh 41: 325–326.
Maas, P.J.M. Project Systematics of Annonaceae. Taxon 32: 528–529.
Maas, P.J.M. & collaborators. Synoptical key to the Neotropical genera in Annonaceae. Meded. Bot. Mus. Herb. Utrecht 516: 1–12.

1984

Morawetz, W. & P.J.M. Maas. Notes on the systematics of the Amazonian genus Guatteriella (Annonaceae). Pl. Syst. Evol. 148: 19–23.
Grothe, E.H.M. & P.J.M. Maas. A scanning electron microscopic study of the seed coat of Curtia Chamisso & Schlechtendal and Hockinia Gardner (Gentianaceae). Proc. Kon. Ned. Akad. Wetensch., Ser. C, 87: 33–42.
Ter Welle, B.J.H. & P.J.M. Maas. Heliconia: Koningsbloem uit Zuid-Amerika. Groei en Bloei 1: 17–19.
Maas, P.J.M., A. Timmerman & L.Y.Th. Westra. Studies in Annonaceae. I. New species in Anaxagorea A. St. Hil. from the Neotropics. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 87: 297–303.
Maas, P.J.M. & L.Y.Th. Westra. Studies in Annonaceae. II. A monograph of the genus Anaxagorea A. St. Hil. Part 1. Bot. Jahrb. Syst. 105: 73–134.

1985

Maas, P.J.M. & L.Y.Th. Westra. Studies in Annonaceae. II. A monograph of the genus Anaxagorea A. St. Hil. Part 2. Bot. Jahrb. Syst. 105: 145–204.
Maas, P.J.M. Nomenclatural notes on Neotropical Lisyantheae (Gentianaceae). Proc. Kon. Ned. Akad. Wetensch., Ser. C, 88: 404–412.
Maas, P.J.M. Musaceae. Flora of the Guianas 1: 1–28.
Maas, P.J.M. Zingiberaceae. Flora of the Guianas 1: 29–67.
Maas, P.J.M. Cannaceae. Flora of the Guianas 1: 69–73.

1986

Maas, P.J.M. & T. Rübsamen. Triuridaceae. Flora Neotropica 40: 1–62.
Maas, P.J.M. & P. Ruyters. Voyria and Voyriella (Saprophytic Gentianaceae). Flora Neotropica 41: 63–156.
Maas, P.J.M., H. Maas-van de Kamer, J. van Benthem, H.C.M. Snelders & T. Rübsamen. Burmanniaceae. Flora Neotropica 42: 157–345.
Maas, P.J.M., L.Y.Th. Westra & J. Koek-Noorman. Studies in Annonaceae. V. Additional notes on Anaxagorea A. St. Hil. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 89, 1: 75–82.
Maas, P.J.M., E.C.H. van Heusden, J. Koek-Noorman, A.K. van Setten & L.Y.Th. Westra. Studies in Annonaceae. VII. New species from the Neotropics and miscellaneous notes. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 89: 249–278.
Maas, P.J.M. Onderzoek aan Annonaceae. I. Inleiding. Hortus 5, 1: 7–14.

1987

Maas, P.J.M., G.B.A. van Reenen & H. ter Steege. Neotropische Flora van A tot Z: 1–255. Projectgroep Herbarium Utrecht.

Maas, P.J.M. & H. Maas-van de Kamer. Ecuadorian Saprophytes, a preliminary review. Opera Botanica 92: 131–145.
Maas, P.J.M. & H. Maas-van de Kamer. Notes on New World Zingiberaceae. III. Some new species in Renealmia. Notes Roy. Bot. Gard. Edinburgh 44: 237–248.
Maas-van de Kamer, H. & P.J.M. Maas. A new Thismia (Burmanniaceae) from French Guiana. Brittonia 39: 376–378.
Maas, P.J.M., E.A. Mennega & L.Y.Th. Westra. Index to neotropical taxa of Annonaceae: 1–135. Utrecht, Institute of Systematic Botany.
Maas, P.J.M., S.R. Gradstein, G.B.A. van Reenen & H. ter Steege. Handleiding bij de cursus 'Tropische Flora'. 1–269. Projectgroep Herbarium, Utrecht.

1988

Maas, P.J.M. & H. Maas-van de Kamer. Triuridaceae. Flora de Colombia 6: 1–29.
Maas, P.J.M. & H. Maas-van de Kamer. Burmanniaceae. Flora de Colombia 6: 33–125.
Maas, P.J.M. Onderzoek aan Annonaceae. II. Morphologie. Hortus 7: 7–20.
Maas, P.J.M. & B.J.H. ter Welle. A Garden of Gesneriaceae: Nariño, Colombia. The Gloxinian 38, 4: 21–23.
Maas, P.J.M. & H. Maas-van de Kamer. Cannaceae. Flora of Ecuador 32: 1–9.
Maas, P.J.M., E.C.H. van Heusden, J. Koek-Noorman, A.K. van Setten & L.Y.Th. Westra. Studies in Annonaceae. IX. New species from the Neotropics and miscellaneous notes. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 91: 243–282.

1989

Maas, P.J.M. & H. Maas-van de Kamer. Triuridaceae. Flora of the Guianas 5: 1–16.
Maas, P.J.M. & H. Maas-van de Kamer. Burmanniaceae. Flora of the Guianas 6: 1–43.
Maas, P.J.M., J. Koek-Noorman, H. Lall, B.J.H. ter Welle & L.Y.Th. Westra. Botanical exploration in the northern part of the Rupununi Savanna and in the Mabura Hill area (Guyana), August 20 – October 9, 1988. Internal report.
Maas, P.J.M., S.R. Gradstein, G.B.A. van Reenen & H. ter Steege. Handleiding bij cursus 'Tropische Flora'. 1–285. Third edition. Projectgroep Herbarium, Utrecht.
Jansen-Jacobs, M.J. & P.J.M. Maas. Planten op reis. Botanische Tuinen, een bijzondere wereld aan planten: 26–30. Zomer & Keuning, Ede.
Maas, P.J.M. & L.Y.Th. Westra. Studies in Annonaceae. XI. Monograph of Rollinia: preliminary notes. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 92: 297–324.
Rypkema, H.R. & P.J.M. Maas. Flora Neotropica. Base Map nr. 1. New edition.
Maas, P.J.M. & H. Maas-van de Kamer. Monocostus uniflorus: Een bijzondere plant. Hortus 8: 18–22.

1990

Koek-Noorman, J., L.Y.Th. Westra & P.J.M. Maas. Studies in Annonaceae. XIII. The role of morphological characters in subsequent classifications of Annonaceae: a comparative survey. Taxon 39: 16–32.
Van Setten, A.K. & P.J.M. Maas. Studies in Annonaceae. XIV. Index to generic names of Annonaceae. Taxon 39: 675–690.
Maas, P.J.M. & H. Maas-van de Kamer. Flora Vascular de la Isla Española. Burmanniaceae. Moscosoa 6: 134–139.
Maas, P.J.M. & H. Maas-van de Kamer. Flora Vascular de la Isla Española. Zingiberaceae. Moscosoa 6: 140–151.

1991

Cruden, R.W., P.J.M. Maas & H. Maas-van de Kamer. Hagenbachia (Liliaceae): Reexamination of its familial placement, its authors, the lectotype, and other collections. Taxon 40: 445–452.

He, P., J. Koek-Noorman, P.J.M. Maas & L.Y.Th. Westra. Numerical analysis of variation in the Deutzia longifolia group (Hydrangeaceae). Proc. Kon. Ned. Akad. Wetensch., Ser. C, 94, 3: 361–375.
Maas, P.J.M. Burmanniaceae. Flora fanerogâmica da Ilha do Cardoso 1: 78.

1992

Maas, P.J.M., P. Baas, F.D. Boesewinkel, P. Hiepko, D. Lobreau-Callen, L. van den Oever & B.J.H. ter Welle. Studies on the Flora of the Guianas no. 71. The identity of 'Unknown Z': Maburea Maas, a new genus of Olacaceae in Guyana. Bot. Jahrb. Syst. 114: 275–291.
Maas, P.J.M., L.Y.Th. Westra et al. Rollinia (Annonaceae). Flora Neotropica 57: 1–188.
Maas, P.J.M. In: J. Boggan et al. Checklist of the Plants of the Guianas: 68–71 (Annonaceae), 152–154 (Gentianaceae), 192 (Burmanniaceae), 292 (Cannaceae), 293–294 (Costaceae), 305 (Haemodoraceae), 306 (Heliconiaceae), 345 (Strelitziaceae), 346 (Triuridaceae), 348–349 (Zingiberaceae). Published by the Biological Diversity of the Guianas program, Department of Botany, Washington, DC, USA.

1993

Maas, P.J.M. & L.Y.Th. Westra. Neotropical Plant Families. A concise guide to families of vascular plants in the Neotropics. Koeltz Scientific Books, Germany/USA.
Maas, P.J.M. & H. Maas-van de Kamer. Haemodoraceae. Flora Neotropica 61: 1–44.
Maas, P.J.M., L.Y.Th. Westra, N.A.J. Meijdam & I.A.V. van Tol. Studies in Annonaceae. XV. A taxonomic revision of Duguetia A.F.C.P. de Saint-Hilaire sect. Geanthemum (R.E. Fries) R.E. Fries (Annonaceae). Bol. Mus. Paraense Hist. Nat. 9, 1: 31–58.
Maas, P.J.M., J. Koek-Noorman & L.Y.Th. Westra. Studies in Annonaceae. XVIII. New species from the Neotropics and miscellaneous notes. Bot. Jahrb. Syst. 115: 77–95.
Maas, P.J.M. A Monograph of Duguetia. Annonaceae Newsletter 9: 42–47.
Maas, P.J.M. In: L. Brako & J.L. Zarucchi, Catalogue of the Flowering Plants and Gymnosperms of Peru: 38–47 (Annonaceae), 261–262 (Burmanniaceae), 326 (Cannaceae), 535–545 (Gentianaceae), 716 (Menyanthaceae), 1150 (Triuridaceae), 1190–1194 (Zingiberaceae), 1256 (Macrocarpaea loranthoides (Griseb.) Maas comb. nov.). Missouri Botanical Garden, St. Louis, Missouri, USA.
He, P. & P.J.M. Maas. Studies in Annonaceae. XVI. A taxonomic revision of Duguetia A.F.C.P. de Saint-Hilaire sect. Duguetia (Annonaceae) in eastern Brazil. Bol. Mus. Paraense Hist. Nat. 9, 2: 143–206.

1994

Maas, P.J.M. & H. Maas-van de Kamer. Burmanniaceae. Flora Mesoamericana: 80–85.
Maas, P.J.M. & H. Maas-van de Kamer. Haemodoraceae. Flora of the Guianas 15: 103–112.
Maas, P.J.M., E.A. Mennega & L.Y.Th. Westra. Studies in Annonaceae. XXI. Index to species and infraspecific taxa of neotropical Annonaceae. Candollea 42: 389–481.
Van Zuilen, C.M. & P.J.M. Maas. Studies in Annonaceae. XXII. A taxonomic revision of Duguetia A. St.-Hil., sections Alcmene and Xylopipetalum. Bot. Jahrb. Syst. 116: 221–242.

1995

Maas, P.J.M. Burmanniaceae. Flora of the Pico das Almas: 659–660. Whitstable Litho Ltd., Kent.
Van Zuilen, C.M., J. Koek-Noorman & P.J.M. Maas. A phylogenetic analysis of Duguetia (Annonaceae) based on morphological data. Studies in Annonaceae. XXIII. Pl. Syst. Evol. 1994: 173–188.
Chatrou, L.W., P.J.M. Maas & H. Rainer. Travel report on the Annonaceae collecting trip Peru 1994. Annonaceae Newsletter 10: 1–39.
Steyermark, J.A., P.J.M. Maas, P.E. Berry, D.M. Johnson, N.A. Murray & H. Rainer. Annonaceae. In: J.A. Steyermark, P.E. Berry & B. Holst (eds.), Flora of the Venezuelan Guayana 2: 413–469.

1996

Maas, P.J.M. & L.W. Chatrou. Novelties in neotropical Annonaceae. Studies in Annonaceae. XXVII. Feddes Repert. 106 (1995) 5–8, 341–346.

Maas, P.J.M. Monograph of Duguetia: preliminary notes. Studies in Annonaceae. XXX. Bot. Jahrb. Syst. 118: 187–227.

He, P. & P.J.M. Maas. Multivariate analyses of the morphological variation and systematic study in the Duguetia calycina complex. Studies in Annonaceae. XXIX. Bot. Jahrb. Syst. 118: 365–405.

1997

Maas, P.J.M. & H. Maas-van de Kamer. Burmanniaceae. In: J.A. Steyermark, P.E. Berry & B. Holst (eds.), Flora of the Venezuelan Guayana 3: 678–688.

Maas, P.J.M. & H. Maas-van de Kamer. Guide to the Vascular Plants of Central French Guiana. In: S.A. Mori et al. (eds.), Studies on the Flora of the Guianas 83: 237 (Cannaceae); 243–244 (Costaceae); 365–367 (Strelitziaceae); 371–373 (Zingiberaceae). Mem. New York Bot. Gard. 76, 1.

Maas-van de Kamer, H. & P.J.M. Maas. Guide to the Vascular Plants of Central French Guiana. In: S.A. Mori et al. (eds.), Studies on the Flora of the Guianas 83: 232–237 (Burmanniaceae); 270 (Haemodoraceae); 367–371 (Triuridaceae). Mem. New York Bot. Gard. 76, 1.

Chatrou, L.W., P.J.M. Maas, C.P. Repetur & H. Rainer. Preliminary list of Ecuadorean Annonaceae. In: R. Valencia & H. Baslev (eds.), Estudios sobre Diversidad y Ecología de Plantas: 97–123. Pontifica Universidad Catolica del Ecuador.

Maas, P.J.M. & H. Maas-van de Kamer. Two new species of Costus (Costaceae) from Costa Rica. Brittonia 49: 274–279.

1998

Maas, H. & P.J.M. Maas. Costaceae. In: J.A. Steyermark, P.E. Berry & B. Holst (eds.), Flora of the Venezuelan Guayana 4: 424–430.

Larsen, K., J.M. Lock, H. Maas & P.J.M. Maas. Zingiberaceae. In: K. Kubitzki, The Families and Genera of Vascular Plants 4: 474–495. Springer Verlag, Berlin, Heidelberg, New York.

Maas, P.J.M. & L.Y.Th. Westra. Familias de Plantas Neotropicales. Una guía concisa a las familias de plantas vasculares en región neotropical: 1–315. Ganther Verlag, Vaduz, Liechtenstein.

Lammers, T.G. & P.J.M. Maas. First report of the genus Burmeistera (Campanulaceae) from Honduras. Sida 18: 363.

1999

Struwe, L., P.J.M. Maas, O. Pilhar & V. Albert. Gentianaceae. In: J.A. Steyermark, P.E. Berry & B. Holst (eds.), Flora of the Venezuelan Guayana 5: 474–542.

Maas, P.J.M. & H. Maas. Haemodoraceae. In: J.A. Steyermark, P.E. Berry & B. Holst (eds.), Flora of the Venezuelan Guayana 5: 576–581.

Ribeiro, J.E.L.S., P.J.M. Maas, H. Maas & J.M. Miralha. Annonaceae. In: J.E.L.S. Ribeiro et al. (eds.), Flora da Reserva Ducke, Guia de identificação das plantas vasculares de uma floresta de terra-firme na Amazônia Central: 121–136.

Costa, M.A.S., H. Maas & P.J.M. Maas. In: J.E.L.S. Ribeiro et al. (eds.), Flora da Reserva Ducke, Guia de identificação das plantas vasculares de uma floresta de terra-firme na Amazônia Central: 566–568 (Gentianaceae); 652–653 (Triuridaceae).

Costa, M.A.S., P.J.M. Maas & H. Maas. In: J.E.L.S. Ribeiro et al. (eds.), Flora da Reserva Ducke, Guia de identificação das plantas vasculares de uma floresta de terra-firme na Amazônia Central: 693–694 (Thurniaceae); 710–712 (Heliconiaceae e Strelitziaceae); 712–713 (Costaceae e Zingiberaceae); 725–728 (Burmanniaceae).

Zijlstra, G., P.J.M. Maas & K.N. Gandhi. On the nonexistence of Lisyanthus Aublet. Harvard Pap. Bot. 4: 289–292.

Born, M.G., P.J.M. Maas, R.L. Dressler & L.Y.Th. Westra. A revision of the saprophytic orchid genera Wullschlaegelia and Uleiorchis. Bot. Jahrb. Syst. 121: 45–74.

He, P., J. Koek-Noorman & P.J.M. Maas. Studies in Annonaceae. XXXV. Phylogeny of the Guatteria-group and Related Genera. Acta Bot. Yunn. 21, 3: 269–286.

2000

Ter Steege, H., D. Sabatier, H. Castellanos, T. van Andel, J. Duivenvoorden, A. Adalardo de Oliveira, R. Ek, R. Lilwah, P.J.M. Maas & S. Mori. A regional perspective: analysis of Amazonian floristic composition and diversity that includes the Guiana shield. In: H. ter Steege, Plant Diversity in Guyana: 19–35. Tropenbos Series 18. The Tropenbos Foundation. Wageningen; J. Trop. Ecol. 16: 801–828.

Chatrou, L.W., J. Koek-Noorman & P.J.M. Maas. Studies in Annonaceae. XXXVI. The Duguetia Alliance: where the ways part. Ann. Missouri Bot. Gard. 87: 234–245.

Zamora, N. & P.J.M. Maas. Two new costarican species of Guatteria Ruiz & Pav. (Annonaceae) of Section Chasmantha R.E. Fr. Bot. Jahrb. Syst. 122: 241–248.

2001

Maas, P.J.M. & H. Maas-van de Kamer. Flora de Nicaragua. Monographs in Systematic Botany from the Missouri Botanical Garden 85, 1: 498–500 (Burmanniaceae.); 565–566 (Cannaceae); 680–685 (Costaceae).

Maas, P.J.M. & H. Maas-van de Kamer. Haemodoraceae. Flora de Nicaragua. Monographs in Systematic Botany from the Missouri Botanical Garden 85, 2: 1129–1130. Missouri Botanical Garden Press, St. Louis, Missouri.

Maas, P.J.M. & H. Maas-van de Kamer. Zingiberaceae. Flora de Nicaragua. Monographs in Systematic Botany from the Missouri Botanical Garden 85, 3: 2549–2554. Missouri Botanical Garden Press, St. Louis, Missouri.

Steyermark, J.A., P.J.M. Maas, P.E. Berry, D.M. Johnson, N.A. Murray & R. Rainer. Annonaceae. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 4–6.

Maas, P.J.M. & H. Maas-van de Kamer. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 41 (Burmanniaceae); 102 (Haemodoraceae).

Maas, P.J.M. & B.A. Stein. Cannaceae. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 51–52.

Maas-van de Kamer, H. & P.J.M. Maas. Costaceae. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 65.

Jansen-Jacobs, M.J., P.J.M. Maas, L. Struwe, O. Pihlar & V.A. Albert. Gentianaceae. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 99–101.

Maas, P.J.M., W.J. Kress & L.L. Andersson. Heliconiaceae. In: T. Hollowell et al., Preliminary checklist of the plants of the Guiana shield 1: 102–103.

Maas, P.J.M., H. Maas-van de Kamer, L. Junikka, R. de Mello Silva & H. Rainer. Annonaceae from Central-eastern Brazil. Rodriguésia 52: 61–94.

2002

Bouman, F., L. Cobb, N. Devente, V. Goethals, P.J.M. Maas & E. Smets. The seeds of Gentianaceae. In: L. Struwe & V.A. Albert, Gentianaceae. Systematics and Natural History: 498–573. Cambridge University Press, United Kingdom.

2003

Maas, P.J.M. & H. Maas-van de Kamer. Annonaceae. In: S.A. Mori, G. Cremers, C. Gracie, J.-J. de Granville, S.V. Heald, M. Hoff & J.D. Mitchell (eds.), Guide to the vascular plants of central French Guiana. Part 2. Dicotyledons. Mem. New York Bot. Gard. 76, 2: 53–67.

Maas-van de Kamer, H. & P.J.M. Maas. Gentianaceae. In: S.A. Mori, G. Cremers, C. Gracie, J.-J. de Granville, S.V. Heald, M. Hoff & J.D. Mitchell (eds.), Guide to the vascular plants of central French Guiana. Part 2. Dicotyledons. Mem. New York Bot. Gard. 76, 2: 328–334.

Maas, P.J.M. & L.Y.Th. Westra. Revision of the Neotropical genus Pseudoxandra (Annonaceae). Blumea 48: 201–259.
Maas, P.J.M., L.Y.Th. Westra, L.W. Chatrou & collaborators. Duguetia (Annonaceae). Flora Neotropica 88: 1–275.
Ter Steege, H., P.J.M. Maas, et al. A spatial model of tree α-diversity and tree density for the Amazon. Biodiversity and Conservation 12: 2255–2277.
Maas, P.J.M. & H. Maas-van de Kamer. Haemodoraceae. Flora of Ecuador 71: 109–114.
Maas, P.J.M. & H. Maas-van de Kamer. Costaceae. In: B.E. Hammel, M.H. Grayum, C. Herrera & N. Zamora (eds.), Manual de Plantas de Costa Rica. Vol. II (Gimnospermas y Monocotiledóneas (Agavaceae-Musaceae): 413–423. Missouri Botanical Garden, INBio (Instituto Nacional de Biodiversidad), Museo Nacional de Costa Rica.
Maas-van de Kamer, H. & P.J.M. Maas. In: B.E. Hammel, M.H. Grayum, C. Herrera & N. Zamora (eds.), Manual de Plantas de Costa Rica. Vol. II (Gimnospermas y Monocotiledóneas (Agavaceae-Musaceae): 376–383 (Burmanniaceae); 384–385 (Cannaceae); 576–577 (Haemodoraceae). Missouri Botanical Garden, INBio (Instituto Nacional de Biodiversidad), Museo Nacional de Costa Rica.

COLLECTING TRIPS IN THE NEOTROPICS BY P.J.M. MAAS BETWEEN 1964 AND 2003

countries	Collected numbers	Accompanying botanists
	1964–1965	
Suriname	PAF 2300–3161[1]	P.A. Florschütz
	PAF 3162–3395[1]	–
	LBB 10689–11068	R. Elburg; J.A. Tawjoeran
	1965	
Trinidad	PAF 3396–3442[1]	–
Jamaica	PAF 3443–3449[1]	G. Proctor
	1971	
Brazil: Amaz., Acre	P 11500–16537[2]	
Brazil: Amaz., Rondônia	211–528	H. Maas-van de Kamer
Guyana	529–530	H. Maas-van de Kamer
Suriname	531–566	H. Maas-van de Kamer
Venezuela	567–573	G. Agostini
Colombia	574–645	E. Escobar
Panama	646–753	R.L. Dressler
Costa Rica	754–900	–
	1974	
Honduras	1030–1060	A. Molina R.
Costa Rica	1061–1535	J. Cramer; B. MacAlpin; O. Ovares; J. Sterringa
Panama	1536–1780	R.L. Dressler; K. Frost; H. Kennedy; S. Mori
Colombia	1781–2160	E. Escobar; R. Jaramillo; T. Plowman
Venezuela	2161–2175	V. Badillo
French Guiana	2176–2290	J.J. de Granville; J. Koek-Noorman; H. Maas-van de Kamer; A.M.W. Mennega
Suriname	2291–2371	J. Koek-Noorman; H. Maas-van de Kamer; A.M.W. Mennega; P. Teunissen
	1977	
Guyana	2408–2686	R. Boyan; H. Maas-van de Kamer
Trinidad	2687–2693	H. Maas-van de Kamer; D. Philcox

Panama	2694–2849	C.C. Berg; R.L. Dressler
Ecuador	2850–3072	C.C. Berg; J. Jaramillo; B.J.H. ter Welle
Brazil: Manaus	3073–3113[3]	C.C. Berg; P. Lisboa; B.J.H. ter Welle
Brazil: R. de Janeiro	3114–3425	D. Araujo; P. Carauto; L. Landrum; G. Martinelli
		1979
Guyana	3480–4479	W. Driehuis; E. Eetgerink; R. van Leeuwen; H. Persoon; H. Snuverink; E. Timmerman; L.Y.Th. Westra
Trinidad	4480–4485	L.Y.Th. Westra
		1980
Peru	4487–4666	L. Cobb; E. Grothe
Ecuador	4667–4837	L. Cobb
Panama	4838–5078	R.L. Dressler
Venezuela	5079–5395	A. Field; O. Huber; B. Manara; P. Redmond; J.A. Steyermark; S.S. Tillett
		1981
Guyana	5398–5932	H.J. Groen; E.A. Mennega; B.J.H. ter Welle
		1984
Peru	5952–6178	H. Maas-van de Kamer; C. Roersch; J. Schunke V.; L.Y.Th. Westra
Peru	6179–6391	E.C.H. van Heusden; J. Koek-Noorman; J. Schunke V.
		1985
Dominican Rep.	6397–6453	M. Mejía; T. Zanoni
Puerto Rico	6454–6497	Flora Neotropica team
		1986
Colombia	6498–6533[4]	H. León; H. Sipman; R. Veloso; B.J.H. ter Welle
		1987
Brazil: Amaz.	6566–6948	C.A. Cid; D.C. Daly; C. Farney; J. Guedes; R.P. Lima; J.F. Ramos; W.A. Rodrigues; D.W. Stevenson
Brazil: Amaz.	6949–6956	H. Maas-van de Kamer; J.M.S. Miralha; A.C. Webber
Brazil: Bahia	6957–7085	H.S. Brito; J.L. Hage; L.A.M. Silva
Brazil: R. de J., S. Paulo	7086–7098	K. Brown; J.P.P. Carauta; H. Maas-van de Kamer
		1988
French Guiana	7099–7122	C.C. Berg; W. Morawetz
Guyana	7123–7740	J. Koek-Noorman; H. Lall; B.J.H. ter Welle; L.Y.Th. Westra
		1990
Cuba	7741–7770	A.M. Giulietti; R.H. Harley; P.J. Rudall; A.J. Urguiola C.
Brazil: Amaz., Pará	7771–7792	D. Coêlho; J. Koek-Noorman; J.M.S. Miralha; N.A. Rosa; M. Rosa; A.C. Webber
		1991
Costa Rica	7793–8040	M.M. Chavarría; B.E. Hammel; H. Maas-van de Kamer
Guyana	8041	B. Ramsaroop; A. Thompson; P. Thompson

		1992
Brazil: Amaz.[5]	8043–8059	C.M. van Zuilen
		1993
French Guiana	8060–8105	T. Croat; C. Gracie; H. Maas-van de Kamer; S.A. Mori; T.D. Pennington; D. Read
Trinidad and Tobago	8108–8151	R. Hammond; H. Maas-van de Kamer; S. Smith; C. Starr
		1994
Argentina	8153–8184	R.M. Harley; B.B. Klitgaard; B.J.H. ter Welle
Peru	8185–8316	M. Aguilar R.; N. Arévalo; L.W. Chatrou; B. Chota; P. Dias; H. Rainer; G. Criolla D.
		1995
Venezuela: Is. da Margarita	8317–8355	H. Maas-van de Kamer
Brazil: Amaz., Pará	8356–8370	C.C. Berg; D. Costa; H. Maas-van de Kamer; J.M.S. Miralha; J. Oliveira; M. Rosa; E. Ribeiro; A.C. Webber
		1996
Dominican Rep.	8371–8423	R. García; J. González P.; H. Maas-van de Kamer; C. Roersch
Honduras	8424–8516	H. Maas-van de Kamer; R. Zuniga
		1997
Ecuador	8517–8620	L.W. Chatrou; J.L. Clark; C. Repetur
		1998
Mexico: Oaxaca	)[6]	M. Ishiki; H. Maas-van de Kamer
		1999
Bolivia: Beni	8654–8815	H. Maas-van de Kamer
Brazil: R. de J., Esp. Santo	8816–8840	C. Farney; D.A. Folli; L. Junikka; L. Kollmann; B.C. Kurtz; A. Lobão; H. Maas-van de Kamer; C.L. Oliveira
		2001
Brazil: Acre	8888–9274	H. Maas-van de Kamer; R.L.O. Maia; E.C. Oliveira; J. Prado; D.P.G. Silva
Brazil: Amaz.	)[7]	H. Maas-van de Kamer; A.C. Webber
		2003
French Guiana	9303–9351	S. Bollendorf; M. Christenhusz; H. Maas-van de Kamer; J. Moonen

1) With the exception of PAF 2300–3161, the PAF-numbers should be cited as Maas (PAF).
2) Under the Prance numbering series; P12647–12874 included in Maas's own series.
3) Collections lost by fire.
4) And 1239–1696 under the León numbering series.
5) In the same year also under the numbers of D.A. Folli in Espirito Santo; those of J.M.S. Miralha in Amazonas; those of A. Amorim in Bahia.
6) 2189–2407 under the Ishiki numbering series.
7) 1883–1900 under the Webber numbering series.