Record Nr. UNINA9910733734303321 Progress in the Chemistry of Organic Natural Products 105 / / edited by Titolo A. Douglas Kinghorn, Heinz Falk, Simon Gibbons, Jun'ichi Kobayashi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-49712-X Edizione [1st ed. 2017.] 1 online resource (V, 215 p. 120 illus., 59 illus. in color.) Descrizione fisica Collana Progress in the Chemistry of Organic Natural Products, , 2192-4309;; 105 547 Disciplina Soggetti Chemistry, Organic Pharmaceutical chemistry Medicinal chemistry Organic Chemistry **Pharmaceutics Medicinal Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Xanthine Alkaloids: occurrence, biosynthesis, and function in plants --Nota di contenuto The Iboga Alkaloids -- A critical evaluation of the quality of published 13C-NMR-Data in natural product chemistry. The first contribution reviews the occurrence of xanthine alkaloids in Sommario/riassunto the plant kingdom and the elucidation of the caffeine biosynthesis pathway, providing details of the N-methyltransferases, belonging to the motif B' methyltransferase family which catalyze three steps in the four step pathway leading from xanthosine to caffeine. The second contribution in this book provides a background on the molecule and related compounds and update knowledge on the most recent advances in Iboga alkaloids. The third contribution presents a comprehensive analysis of frequently occurring errors with respect to 13C NMR spectroscopic data and proposes a straightforward protocol to eliminate a high percentage of the most obvious errors.