Abul<u>h</u>ayr al'Išbili, *Kitābu* '*Umdati ṭṭabīb fi ma'rifati nnabāt likulli labīb* (Libro base del médico para el conocimiento de la botánica por todo experto). Vol. 1. Texto Árabe. Edición, notas y traducción castellana de J. Bustamante, F. Corriente y M. Tilmatine. Madrid: Consejo Superior de Investigaciones Científicas, 2004 (Fuentes Arábico-Hispanas; 30); 857 p.

More than sixty years have elapsed since D. Miguel Asín Palacios first acquainted the academic community with one of the most important botanical encyclopaedias of medieval Islam. Although the 'Umdat altabīb has ever since attracted the attention of a number of scholars, it is only now that a true critical edition is available at last. This new issue of the well-known collection Fuentes Arábico-Hispanas published by the CSIC is to be shortly complemented with a second volume containing the matching annotated Spanish translation, the difficulty of which has required to parcel out this publication in three parts, the third one containing indices and additional annotation. The first volume under review here contains the Arabic text based upon the two extant manuscripts (Madrid, Real Academia de la Historia, Col. Gayangos, Ms. XL, and Rabat, al-Khizāna al-'Āmma li-l-Kutub wa-l-Wathā'iq, Ms. 3505), followed by a list of textual variants in the manuscripts and the Arabic index of plant names and their etyma. Only a single page foreword appears at the beginning and the end of the volume (in Arabic and Spanish); therefore, this reviewer assumes that data regarding the manuscripts, textual criticism or editing criteria will be included in the study which presumably is to accompany the Spanish translation and further indices in volume 2 or 3. Nevertheless, we must celebrate this publication, the importance of which cannot be understood without a brief survey of the work under discussion, its nature and the history of earlier attempts at publishing it.

The 'Umdat al-ṭabīb is an extensive dictionary of plants written during the eleventh or

twelfth-century in al-Andalus. Each entry usually reports the botanic genus to which a given plant belongs and its different varieties, along with the morphological description of the root, stem, branches, leaves, flower, fruit, sap, gums and resins. The texture, colour, shape, size or any other physical feature such as taste, smell, etc. are also mentioned. This is followed by the names of the plant in a number of languages: Greek, Latin, Persian, Berber, Syriac, Indian (unspecified), Romance ('ajamiyya,.i.e., languages Andalusī Romance dialect, and afranjī, which seems to designate North Eastern Iberian Romance), etc. Likewise, the habitat of the plant is usually given, either in terms of type of soil in which it grows and the actual places in which the author has personally seen it. Besides, the description of each plant ends with the enumeration of its industrial, domestic and pharmacological uses, the latter explaining the diseases for which it is recommended and the correct dosage to be administered. Often, the author also refers traditional superstitions about alleged virtues of a given plant. Therefore, the interest of the 'Umdat al-ţabīb is beyond any question in terms of botanic lexicography, ethnobotany, linguistics, toponymy, pharmacology and anthropology.

Composed in the golden period of pharmacological, botanical and agronomic literature in al-Andalus, the authorship of the 'Umdat al-

tabīb has been subject of much speculation for a long time. Little is known about Abū l-Khayr's life, namely, that he was a contemporary of the king al-Mu'tamid of Seville (r. 1069-1091), and that he wrote a Kitāb al-Filāḥa (ed. and trans. by J. Carabaza Bravo, Madrid: AECI, 1991). Since, as E. García Sánchez has noted ("El botánico anónimo sevillano y su relación con la escuela agronómica andalusí", in Ciencias de la Naturaleza en al-Andalus, III, Granada: CSIC, 1994, pp. 193-210), medieval Islamic biographical sources are silent with regard to Andalusi agronomists, perhaps now we are closer to a definitive attribution. In according to the auto-biographical data found in the 'Umdat al-ṭabīb, Abū l-Khayr would have been a disciple of the Andalusi agronomists Ibn Başşāl and Ibn al-Lunguh (d. 1105), and probably worked in that sovereign's experimental garden (a feature of medieval Islamparticularly fashionable in Andalus— usually overlooked by historians of later epochs). Chronologically, he lived in the second half of the eleventh century, probably also in the beginning of the twelfth century and, to judge by the number of places in which he states to have seen a particular plant, we may assume that he travelled extensively throughout the Iberian Peninsula, at the time immersed in the "Reconquista" warfare against the Petty Kingdoms and the Almoravid invasion. In 1990, according to the analysis of textual evidence regard-

ing the attribution to Abū l-Khayr of a Kitāb al-Nabāt in later Islamic botanical works, the author's identification was suggested by E. García Sánchez and was also immediately claimed by M.A. al-Khattābī in his edition of this work. The former. however. particularly striking the fact that Abū l-Khayr himself is quoted once as a source in his own botanic treatise, and therefore, unless the scholars responsible for the present edition have done new findings in this front, perhaps new manuscript copies or biographical data in other sources would have to come to light in order to confirm definitively that Abū l-Khayr al-Ishbīlī is the author of the 'Umdat al-ṭabīb fi ma'rifat al-nabāt li-kulli labīb. Nevertheless, the attribution of the work under review raises an issue which is worth of comment with regard to the copying trade. Interestingly, the two extant copies are attributed to physician Christian Baghdad, al-Mukhtār b. al-Hasan b. 'Abdūn b. Sa'dūn, known as Ibn Buțlān (d. 1066). Although such an authorship could be easily refuted in the case of this work, it is a significant example of the extent to which Muslim copyists can be absolutely ignorant about the work they are reproducing, or worse, that they could intentionally attribute it to a well-known figure for the sake of mere profit, in spite of which, however, the copysts' attributions of a given work to a particular medieval Islamic scholar in the mss. are often taken as a reliable evidence of its authorship. Incidentally, another issue raised by the work under discussion is what ever became of a third manuscript containing the 'Umdat al-ṭabīb, owned and brought to the attention of the scientific community by Georges S. Colin towards 1938, which was anonymous according to Asín's knowledge.

Concerning earlier published versions of this work, in 1943, under the title Glosario de voces romances registradas por un botánico anónimo hispano-musulmán. Siglos XI-XII (Granada: CSIC; reimp. facsimil Zaragoza: Institución Fernando el Católico, Universidad de Zaragoza, 1994), D. Miguel Asín published a partial edition and translation of this botanical work. His main aim was to track down traces of the Romance language spoken in the Islamic and Christian lands of the Iberian Peninsula during the eleventh and twelfth centuries. Since he focused exclusively on the linguistic aspect, he only excerpted the Romance names and included the Arabic text when it their interpretation. concerned Furthermore, he omitted on purpose about fifty items or entries whose meaning he had not been able to identify. Later on, in 1990, M. A. al-Khattābī produced a first whole edition of the Arabic text (2 vols., Rabat: Akadimiyya al-Mamlaka al-Maghribiyya, 1990; 2nd ed., Beirut: Dār al-Gharb al-Islāmī, 1995). However, this publication was far from being a critical edition. Very much in the line of earlier works by

the same scholar, he blended the contents of the extant manuscripts and rearranged the material alphabetically in order to facilitate consultation of the work. Likewise, he omitted particular sections of the text and the linguistic analysis of non-Arabic terms. What we have now in the present volume is not only a scholarly Western edition, but also -and more importantly-a work produced by a fortunately assembled team of specialists in Arabic linguistics, botanic lexicology and dialectology. The solid backgrounds of F. Corriente, J. Bustamante and M. Tilmatine in these fields can only result in a major contribution to Islamic studies in general and —when completed with the Spanish translation and study— in an indispensable tool for scholars dealing with the history of medieval Islamic medicine, pharmacology and allied sciences.

Cristina Alvarez Millán

King, David A., In Synchrony with the Heavens. Studies in Astronomical Timekeeping and Instrumentation in Medieval Islamic Civilization. Volume One. The Call of the Muezzin. Islamic Philosophy, Theology and Science. Texts and Studies. Edited by H. Daiber and D. Pingree. E.J. Brill, Leiden-Boston, 2004.

King, David A., In Synchrony with the Heavens. Studies in

Astronomical Timekeeping and Instrumentation in Medieval Islamic Civilization. Volume Two. Instruments of Mass Calculation. Islamic Philosophy, Theology and Science. Texts and Studies. Edited by H. Daiber and D. Pingree. E.J. Brill, Leiden-Boston, 2005.

In Synchrony with the Heavens is another excellent contribution by David King to the history of medieval Arabic science. It includes thirty-three studies carried out at different times but focused on two main subjects: timekeeping by the stars, and astronomical instruments.

Volume One presents various studies dealing with timekeeping by the sun and stars and the regulation of the astronomically defined times of Muslim prayers. The author has gathered a set of independent studies which were not intended to form part of a book, but which, together, form a coherent whole. The studies are as follows:

I) A survey of tables for timekeeping by the sun and stars; II) A survey of tables for regulating the times of prayer; III) A survey of arithmetical shadow-schemes for time-reckoning; IV) On the times of prayer in Islam; V) On the role of the muezzin and the muwaggit in medieval Islamic societies; VI is divided into: VIa) Universal solutions in Islamic astronomy and VIb) Universal solutions from Mamluk Syria and Egypt; while VII has three parts: VIIa) On the orientation of medieval Islamic