



ERŠĀD AL-ZERĀ'A

ERŠĀDal-ZERĀ'A, a Persian agricultural manual completed in Herat in 921/1515 by Qāsem b. Yūsof Abūnaṣrī, who was previously identified in the scholarly literature simply as Fāzel Heravī (e.g., Petrushevskii, p. 26; Tumanovich, p. 40). It has been called the most important medieval Persian agronomic work discovered so far, and the highpoint of the development of the genre (Lambton, 1977, p. 161; Vesel, p. 101). It consists of an introduction and eight chapters (*rawza*), which cover the following subjects: (1) the various types of soil; (2) astrological and meteorological considerations associated with times of planting, beneficial prayers on planting, measures to protect plants against pests, and the storage of cereals; (3) the cultivation of cereals, legumes, and other field crops; (4) viticulture; (5) horticulture; (6) arboriculture, floriculture, and herbiculture; (7) the grafting of trees and vines, estimating the produce of various market garden crops, the conservation of various types of produce, the preparation of such items as rosewater and confections, and apiculture; (8) the laying out and planting of a *čahār bāg* (q.v.).

The contents of the manual applied specifically to the Herat region of Khorasan (Abūnaṣrī, ed. Mošīrī, p. 50), and not to India as indicated in Storey (II/3, p. 374). While Abūnaṣrī does not mention any earlier sources he may have based his work on, most scholars view the *Eršād al-zerā'a* as part of the Islamic literary tradition of works on agronomy based ultimately on Graeco-Roman, Syriac, or Pahlavi sources (Ullmann, pp. 427-50; Jakobi, pp. 202-5), and influenced by such works as Ebn Waḥšīya's *al-Felāḥa al-nabaṭīya* (Lambton, 1977, p. 161) and the anonymous *Dar ma'refat-e ba'zī omūr ke ahl-e felāḥat-rā*



be-kār āyad (Vesel, p. 100; Afšār, 1982, pp. 691-92). The question of whether the author had firsthand agricultural experience remains moot (Jakobi, p. 205; Subtelny, 1993, p. 174). It is clear, however, that in assembling his data he consulted crop registers (p. 92), as well as people experienced in agricultural matters, in particular, a certain Sayyed Neẓām-al-Dīn Amīr Solṭān Maḥmūd, better known as Mīrak Sayyed Ġiāt and his workmen (pp. 45, 109). The latter has been incorrectly identified with such Timurid figures as Mīr ‘Alī-Šīr Navā’ī and even with members of the Timurid royal family. In fact, he was a landscape architect who worked for the Timurid ruler of Herat, Solṭān-Ḥosayn Bāyqarā (873-911/1469-1506), specializing in the construction and planting of a *čahārbāg*, which is described in the last chapter of the *Eršād* (Subtelny, 1993, p. 176; idem, 1995, pp. 41-45 which contains a translation of the chapter; see also Pugachenkova, pp. 152ff.). He later emigrated from Herat and worked for Bābor in India and ‘Obayd-Allāh Khan in Bukhara, thus being instrumental in the transfer of the Iranian tradition of landscape garden design to both Mughal India and Uzbek Central Asia. His son, Sayyed Moḥammad Mīrak, was the builder of the tomb of Homāyūn in Delhi (Subtelny, 1995, 31-33).

Abūnaṣrī was by profession an accountant and/or surveyor who was attached to the shrine complex of the Sufī patron saint of Herat, ‘Abd-Allāh Anṣārī (q.v.), at Gāzorgāh, just north of Herat. He must have worked for Mīrak Sayyed Ġiāt, since he refers to him as his superior (*Eršād*, pp. 113, 120; Subtelny, 1993, pp. 170-76; idem, 1995, pp. 35-38). Aside from the *Eršād*, he is not mentioned in any contemporary sources and his dates are unknown, but, in view of his occupation, this is to be expected. He claimed to be a descendant of shaikh Abū Naṣr Ṭabasī (d. 500/1106), hence his *nesba*, Abūnaṣrī (*Eršād*, p. 8; Subtelny, 1993, p. 171). The attribution to him of the pen name “Qāne’ī” (e.g., Storey, II/3, p. 374; Meredith-Owens, p. 34; Jakobi, p. 203) is not supported by a close reading and analysis of the introduction to the work (p. 8; see Subtelny, 1993, pp. 170-71). Abūnaṣrī was also the author of a manual on the hydrology of the Herat region, entitled *Resāla-ye ṭarīq-e qesmat-e āb-e qolb* (ed. Māyel Heravī, Tehran, 1347 Š. /1968), and several short handbooks on mathematical and geometrical computation (Afšār, 1965).

The *Eršād al-zerā’a* reflects the highpoint of agricultural development in Khorasan during the late Timurid period. It was, however, completed at the end of a period of precipitous agricultural decline, which began with the Uzbek conquest of Herat in 913/1507, and which culminated in a devastating famine lasting from 919 to 921/1513-15. Dedicated to the Safavid ruler, Shah



Esmā'īl I, the work appears to have been written for two reasons: to record the agricultural and gardening traditions of the Herat region that were in danger of being lost on account of the ruined state of its agriculture at the beginning of the 16th century, and to appeal to the new Safavid government of Khorasan to create conditions conducive to its revival (Subtelny, 1993, esp. pp. 205 ff.). The lengthy introduction to the work, which presents a strong argument for agriculture as the basis for political stability, may be regarded as belonging to the medieval Persian literary genre of “mirrors for princes” (Subtelny, 1993, pp. 197-205).

Bibliography (for cited works not given in detail and for abbreviations found here, see “Short References”):

Editions. ‘Abd-al-Ġaffār Najm-al-Dawla, lithograph ed., Tehran, 1323/1905 (not containing the introduction or chapter 8); ed. M. Mošīrī (with introd. and indices), Tehran, 1346 Š./1967.

Translation. A. A. Seyed-Yacoubi, “Traduction française et étude du traité agronomique persan: ‘Ilm é zeraé v félahé’ (Contribution à l’étude de la langue française),” Ph.D. diss., University of Paris—Sorbonne, 1968 (based on the ed. by ‘Abd-al-Ġaffār).

Studies. Ī. Afšār, “Fehrest-nāma-ye ahamm-e motūn-e kešāvarzī dar zabān-e fārsī,” *Āyanda* 8/10, 1361 Š./1982, pp. 686-94.

Idem, “Rasā’el-ī az mo’allef-e *Eršād al-zerā’a*,” *FIZ* 13, 1344 Š./1965, pp. 7-67.

J. Jakobi, “Agriculture Between Literary Tradition and Firsthand Experience: The *Irshād al-Zirā’a* of Qasim b. Yusuf Abu Nasri Haravi,” in L. Golombek and M. Subtelny, eds., *Timurid Art and Culture: Iran and Central Asia in the Fifteenth Century*, Leiden, 1992, pp. 201-8.

A. K. S. Lambton, “Aspects of Agricultural Organisation and Agrarian History in Persia,” in *HO* I, 6/1, pp. 160-87.

Idem, “Reflections on the Role of Agriculture in Medieval Persia,” in A. L. Udovitch, ed., *The Islamic Middle East, 700-1900: Studies in Economic and Social History*, Princeton, 1981, pp. 283-312.

G. M. Meredith-Owens, *Handlist of Persian Manuscripts 1895-1966*, London, 1968.



I. P. Petrushevskii, *Zemledelie i agrarnye otnosheniia v Irane XIII-XIV vekov* (Agriculture and agrarian relations in Iran in the 13th-14th centuries), Moscow and Leningrad, 1960.

G. A. Pugachenkova, "Sadovo-parkovoe iskusstvo Srednei Azii v èpokhu Timura i timuridov" (The art of gardens and parks in Central Asia during the period of Timur and the Timurids), *Trudy Sredneaziatskogo gosudarstvennogo universiteta* 23, 1951, pp. 143-68; repr. in idem, *Iz khudozhestvennoi sokrovishchnitsy Srednego Vostoka* (From the artistic treasury of the Middle East), Tashkent, 1987, pp. 172-85.

M. E. Subtelny, "A Medieval Persian Agricultural Manual in Context: The *Irshād al-zirā'a* in Late Timurid and Early Safavid Khorasan," *Stud. Ir.* 22/2, 1993, pp. 167-217.

Idem, "Mīrak-i Sayyid Ghiyāsò and the Timurid Tradition of Landscape Architecture: Further Notes to a Medieval Persian Agricultural Manual," *Stud. Ir.* 24/1, 1995, pp. 19-60.

N. N. Tumanovich, *Gerat v XVI-XVIII vekakh* (Herat in the 16th-18th centuries), Moscow, 1989.

M. Ullmann, *Die Natur-und Geheimwissenschaften im Islam*, HO I, 6/2, Leiden, 1972.

Ž. Vesel, "Les traités d'agriculture en Iran," *Stud. Ir.* 15/1, 1986, pp. 99-108.