

فوائد مجرّبة

من فلم جاب جرجس افندي طنوس عون الصيدلاني مؤلف كتاب الدر المنثور في الصنائع والفنون
 مضرة تسر العموم (آفة الجردان) خذ من خشب الغابن او من الاستنجح الناشف
 قطعاً اصغر من الحمص واقطعها بالسمن ثم رش عليها جبناً مغموتاً وانثرها في الحلات التي تاوي اليها الجردان فلان تلك ان تستريح من اذيتها
 فائدة لاولاد المدارس وغيرهم (وصفة حبر) خذ برادة حديد ١٦ درهماً وخلاً بكراً مثلاً
 واخاط الخد يد بنصف كمية الخل في قنبنة واتركه هكذا بضعة ايام وانت تحركه من وقت الى آخر
 وكلما رأيت ان قوام المزيج اشد اصف اليه من الخل الباقى مزوجاً بثمانية دراهم ماء. ثم سخن
 المزيج لتعبر فعل الخل بالخد يد. وعندما يتم ذوبان هذا بذلك اصف اليه سبعة ٢٤ درهماً من
 الزجاج الاخضر وثمانية دراهم من الصمغ العربي متباين في ٢٢ درهماً ماء فلك حبر اسود لائى
 جرد الكتابة على الفاض كالفصان والحمام والحجوار وما اشبهه
 فائدة للصباندين (دواء للكلاب) خذ ١٠ قمح من الافيون و١٢ قمح من
 الككول اى الزنبق الحاور و١٢ قمح من الطرطر
 المنقى واخاطها واعجنها بعسل واقسم معجونها ٦
 حبوب يعطى منها اثنتان للكلب المريض ولا يطام معها غير قليل من مرق العظام او كمن محنة

دافئاً فاذا كمل الحبوب الست ولم يبرأ نعاد عليه. واذا كان الكلب المصاب صغيراً يكفي له حبة واحدة في اليوم
 لتسلية ذوى البطالة (حبة فرعون) خذ من زهر الكبريت درهماً ومن سيانور
 الرقيق ٦ دراهم وامزجها جيداً في ماون زجاج وخذ من هذا المسحوق (سام) وادعجه في قطعة
 من ورق الرصاص الرقيق كما تدعج السيكارة حتى تكون اللثة هرمية الشكل وركزها على عمل
 مستوي واشعل راسها بشدة او بشمعة ملتهبة فيكون لك ما يسمونه حبة فرعون ولك ان تجبل المسحوق
 بما فيه قليل جداً من الصمغ وتدحرجه على بلاطة ليصير كفضيب شمن ريشة الكتابة فتقطعها وتبيسه
 وتشمعه كما سبق القول
 فائدة للكندر حبة (بوية) خذ من كزبرة من الدبس والقمح الحبيبات ١٥
 درهماً ومن الخل ١٢ درهماً وزيت الزيتون درهمين وجامض كبريتيك ٦ دراهم واعرك الجميع جيداً
 في جرن الى ان يصير قوام العجين فلك صباغ اسود (بوية) للجنيد يلمع بسهولة عندما يفرك
 فائدة لمخبي الآثار القديمة خذ قطعة قرطاس كتابة والصفيها بالصمغ
 في قهر صحن او على رقاقة مسنوبة السطح تماماً

entire sultanate through local staffs, and was also responsible for the audit of local accounts ('Afif, 420); a *mushrif* also inspected crops in order to determine the government share (Baranī, *op. cit.*, 288 f.), where the word seems to refer to a local government official rather than to an officer of state.

By the time of Shēr Shāh, the *mushrif* was an official under the *shikkdār*, the administrator of a *shikk* or *pargana*; the word seems to be used loosely as synonymous with *amīn* and *munṣif*, although 'Abbās Sarwānī (B.L. ms. Or. 164, fol. 73b) says that a *mushrif*'s duty was to assess the produce of the crops, and an *amīn*'s to assess the damage caused to crops through movements of armies.

Bibliography: Given in the article.

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✓ **MUSHRIK** [see **SHIRK**].

✓ **AL-MUSHTARĪ**, the planet Jupiter, Pers. *Hurmīzd* < *Aurmīzd* (*Ahura-mazdāh*). The name of the planet is in Sumerian *Shulpa*², later also *Mulu-babbar* "the white star" (= *Μολοβαβαρ* in Hesychios; cf. Meissner, *Babylonien und Assyrien*, Heidelberg 1925, ii, 404); in the later Akkadian period it is always identified with the numen supremum Marduk (Biblical Merodach). In Hebrew it is called *Sedek*, in Greek — just as among the Babylonians, as the symbol of the highest deity — *ὁ τοῦ Διὸς ἀστήρ*. As a synonym of *al-Mushṭarī* we find (e.g. in *Ḥadīth*) the name *Bardjīs* (cf. *Lisān al-ʿArab*, vii, 323).

The Arab astronomers, like Pythagoras and Ptolemy, put Jupiter in the sixth sphere (*falak*) from within, i.e. the third from without. On the interior it adjoins the outer surface of the sphere of Mars and on the exterior the inner surface of the sphere of Saturn. The following table gives the least, mean and greatest distance of Jupiter from the centre of the earth, expressed in radii of the earth, as given by al-Battānī (*Opus astronomicum*, ed. Nallino, ch. 50), al-Farghānī (*Compilatio*, ch. 21), Ibn Rusta (18-20) and Abrahām bar Ḥīyā (*Sphaera mundi*, ch. 9), as well as the Hindu values given by al-Bīrūnī from the compilation by Yaʿqūb b. Ṭarīk of the year 161/777-8, and the modern figures for these distances.

	least distance (perigee)	
al-Battānī	8,022	rad. of the earth
al-Farghānī	8,876	"
Ibn Rusta	8,820	"
Bar Ḥīyā	8,000	"
Hindu (al-Bīrūnī)	8,019 ^{1/21}	"
Modern	92,500	"
	mean distance	
	10,473	rad. of the earth
	11,640 ½	"
	11,503 ½	"
	10,200	"
	10,866 ^{2/3}	"
	122,250	"
	greatest distance (apogee)	
	12,924	rad. of the earth
	14,405	"
	14,187	"
	12,400	"
	13,714 ^{2/7}	"
	152,000	"

The radius of the earth is here estimated at 3,250 (al-Battānī, al-Farghānī and Bar Ḥīyā) and 3,818

Arab miles respectively (Ibn Rusta) while, according to al-Bīrūnī, the Hindus give it as 1,050 *farsakhs* = 3,150 Arab miles (1 Ar. m. = 1,973 metres; cf. Nallino, *Il valore metrico del grado di meridiano*). The true geocentric distances of the planet Jupiter are actually about 11 ½ times greater than given by al-Battānī for example. It should, however, be pointed out that the relation of 37 : 23° 11^{1/18} for the greatest and least observed apparent diameter taken by this scholar, with the help of which the distance of the apogee was calculated from the estimated distance of the perigee at 8,022 radii of the earth, agrees remarkably well with the modern estimate. The apparent diameter of Jupiter at the mean distance is given by al-Battānī as 1/12 of the diameter of the sun. From this and the mean distance he calculates the true diameter of Jupiter at 4^{1/3} diameters of the earth (= 8^{2/3} radii), and its volume at 81 times that of the earth (i.e. 4^{1/3}³). The true values are 2.56 (i.e. 170 times larger): diameter of Jupiter = 11.14 diameters of the earth, volume = 1,380 times the volume of the earth.

Following Ptolemy (*Almagest*), al-Battānī gives the greatest observed northern (geocentric) latitude as 2° 4', the greatest southern as 2° 8'. On the other hand, he points out (chs. 31 and 45) that he found the length of the apogee of the eccentric circle from his observations to be about 8° smaller (in 265/879, 164° 28') than was to be expected from the *Almagest*, taking into account the precession.

The movement of Jupiter is, as in the *Almagest*, represented to be through four circles (*aflāk*) (cf. al-Battānī, *Op. astr.*, ch. 31). The astronomical tables take for its mean daily sidereal motion the value of 5'. Its period of sidereal revolution is given by al-Ḳazwīnī (*Āthār*, ed. Wüstenfeld, i, 26) at 11 years, 10 months, 15 days.

Al-Mushṭarī in astrology. **Al-Mushṭarī** is the ruler (*rabb*) of the *Buyūt al-Rāmī* (Sagittarius, night-house) and *al-Ḥūt* (Pisces, day-house), also night-ruler of the 1. *Muthallathā* (*Triquetrum*), which consist of *al-Ḥamal* (Aries), *al-Asad* (Leo) and *al-Rāmī* (Sagittarius), whose ruler by day is the sun, and finally companion (*rafīk*) of the 3 *Muthallathas*. It has its *sharaf* (exaltation) in the 15° of *al-Sarātān* (Cancer), its *hubūt* in the 15° of *al-Djady* (Capricorn). According to al-Ḳazwīnī (i, 22), "the astrologers call al-Mushṭarī the larger star of fortune", *al-Saʿd al-akbar*, because its good influence surpasses that of Venus; they attribute to it numerous happy states and the greatest good fortune. The idea that the planet Jupiter is a star of good fortune is general among other peoples also; we also find it in Babylonia, India and China. For further details of the part played by Jupiter in Arab astrology, see the works of Abū Maʿshar.

Bibliography: See those to ʿUTĀRID AND MINṬAKAT AL-BURŪDĪ. (W. HARTNER)

MUSHTARIK or **MUSHTARAK** (A.), the active or passive participles of the form VIII verb *ishṭaraka* "to be associated with, common to". Al-Djurdjānī defines the term as qualifying a noun "which has come into use for its multiple meanings, like the word *ʿayn*, because of its association with several meanings". In Ibn Sīnā (Avicenna), the term qualifies a noun associated with a certain number of meanings, i.e., a noun which can have several meanings. As used by modern linguists, it denotes "polysemy".

This is the name which al-Zamaksharī gives to the fourth part of his *K. al-Mufaṣṣal*, in which he treats of phonetic phenomena which are "common" to the three parts of discourse or to two of them only. These phenomena are nine in number: the inclination of the vowel /a/ towards the vowel /i/; pause; the lightening

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Sanhürî, Mesâdirü'l-Hakl. C-4. s. 239