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AN ETHNOHISTORICAL APPROACH TO THE CONTROVERSIES
CONCERNING THE PROVENANCE AND DIFFUSION
OF THE ANCIENT IRANIAN AND INDIAN NAMES OF HEMP *

(Part I)

INTRODUCTION

Many authors have listed and discussed in a more or less wide range the terms by which diverse peoples belonging to the Iranian and Indian groups of the Indo-Iranian (=Aryan) stock denoted hemp (*Cannabis* L.; family *Cannabaceae*) and/or other plants used for similar purposes. They were often juxtaposed with the corresponding names applied by other Indo-European peoples, but also with those attested for the representants of some other linguistic families, mainly from the Finno-Ugrian, Turkic, Kartvelian and Semitic stocks. Besides, some of the Indian terms have been sporadically confronted with their counterparts in the Dravidian, Mon-Khmer and Tai languages, while some of the Iranian ones with those in the Miao and Chinese languages.

The bulk of these data are to be found in the following categories of publications: etymological dictionaries of particular languages or comparative dictionaries of cognate languages; diverse kinds of encyclopaedic elaborations with entries concerning hemp and some other plants having similar functions; papers wholly or partly concerning hemp, including its nomenclature; publications devoted to other subjects (linguistic, religious, etc.), but briefly or quite marginally referring to hemp names.

* This work is dedicated to the fond memory of Doc. dr hab. Władysław Dulęba, still greatly missed by his Colleagues.

The authors of these publications have often advanced their views concerning the most plausible provenance of particular terms, or even suggested alleged prototerms for the whole series of appellations. But, in the dictionaries they were compelled to do it in a very laconical way, while in other publications, in which they could discuss the relevant problems more thoroughly, there are sometimes great lacunas in comparative data. Furthermore, quite divergent opinions, though based on the same or nearly the same set of lexical items, have been often expressed. That should stimulate, therefore, more penetrating inquiries, considering the larger ethnohistorical and palaeolinguistic background as well as looking for further lexical data.

The author of the present paper will only signal certain problems and directions of necessary research and will propose some working hypotheses, not excluding, however, alternative solutions. He undertakes the task realizing that consideration of a wide ethnohistorical context will help, maybe, to disentangle some problems of palaeolinguistic contacts, but also that the results of such inquiries will permit, perhaps, to progress our knowledge of some aspects of the ancient interethnic relations. However, he is well aware that his studies should be still enlarged and deepened, and the way in which he has used and interpreted linguistic data should be verified and corrected by linguists.

As regards the Iranian and Indian appellatives forming the base and starting-point of the discussion in the present paper, independently on the question of their possible mutual relations or lack of them, they may be divided into four sets, each of them grouping the terms evidently cognate¹.

As seen from the meanings that have been attributed to particular terms (see *infra*: Set I-IV), some discrepancies have arisen as regards their botanical identification for the given region and period, and besides hemp, some other plants have been also indicated. Thus, for the Iranian appellatives the flax (*Linum* L., family *Linaceae*) and the henbane (*Hyoscyamus* L., family *Solanaceae*), while for the Indian ones the sunn hemp (*Crotalaria* L., family *Papilionaceae*), have been likewise considered. In some cases it has been also admitted that the same term was applied sometimes both to hemp and flax or to hemp and henbane in the Iranian linguistic area, and possibly also to hemp and sunn hemp in the analogical Indian area.

SET I

Khotan Saka	<i>kaṃha, kāṃha</i>	hemp	H. W. Bailey ²
	<i>kumbā, kāmbā</i>	flax	
	<i>kumba, kanba</i>	hemp	V. I. Abaev ³
Kashgar Saka	<i>kānbā</i>	flax	L. G. Gercenberg ⁴
Sogdian	<i>kyṃp'</i>	hemp (?)	M. Benveniste ⁵
	<i>kyṃp'</i>	hemp	V. I. Abaev ⁶
	<i>kyṃp'</i>	flax	W. B. Henning ⁷
	<i>kyṃp'</i>	hemp, flax	B. Gharib ⁸
Khwarezmian	<i>knb</i>	hemp	V. I. Abaev ⁹
Pahlavi	<i>k'nb</i>		H. W. Bailey ¹⁰
New Persian	<i>kanab, kanaf</i>		I. M. Steblin-Kamensky ¹¹
Wakhi	<i>kəm</i>		I. M. Steblin-Kamensky ¹²
Ishkashmi	<i>kəm</i>		
Shughni	<i>kanāb</i>		I. I. Zarubin ¹³
Sarikoli	<i>kandir</i>		T. N. Pachalina ¹⁴
Kurdish	<i>kinif</i>		M. A. Jaba ¹⁵
Ossetic:		hemp, flax	
Iron	<i>gān</i>		H. W. Bailey ¹⁶
Digoron	<i>gānā</i>		

SET II

Sanskrit	<i>gañja</i>	hemp (especially that from which an intoxicating drink is made)	R. L. Turner ¹⁷
	<i>ganjika</i>	hemp	W. Roxburgh ¹⁸
Prakrit	<i>gañja</i>		R. L. Turner ¹⁹
Oriya	<i>gañja</i>		
Bengali	<i>ganga</i>		W. Roxburgh ²⁰
	<i>gājā</i>		R. L. Turner ²¹
Panjabi			
Nepali	<i>gājā</i>		R. L. Turner ²²
Maithili			
Assami			
Gujarati	<i>gājō</i>		M. Mayrhofer ²³
Kumauni:			
Gangoi dialect	<i>gāj</i>		R. L. Turner ²⁴

SET III

Khotan Saka	<i>śāmvām</i>	hemp	M. Mayrhofer ²⁵
	<i>śāmvā</i>		I. M. Steblin-Kamensky ²⁶
Kroraina language	<i>śamṇa</i>		H. W. Bailey ²⁷
	<i>śamṇa</i>		M. Mayrhofer ²⁸
Pahlavi	<i>san</i>		D. N. Mackenzie ²⁹
New Persian	<i>san</i>		M. Mayrhofer ³⁰
Sanskrit	<i>śaṇā</i>	hemp	R. L. Turner ³¹
	<i>śaṇāh</i>	a species of hemp or sunn hemp	M. Mayrhofer ³²
	<i>śana</i>	sunn hemp	S. Ch. Banerji ³³
	<i>sonaka</i>	sunn hemp (?)	
	<i>śanīka</i>	sunn hemp and other species of the same genus	R. L. Turner ³⁴
Prakrit	<i>saṇa, siṇa</i>	hemp	R. L. Turner ³⁵
Oriya	<i>saṇa, chaṇa</i>	hemp, flax	
Kumauni	<i>saṇ</i>	hemp	
Panjabi			
Gujarati			
Nepali	<i>san</i>		
Bengali			
Bihari	<i>san</i>	fine hemp	
Maithili (NE Tirhut)	<i>sōn</i>		
Sindhi	<i>sinī</i>	hemp	
Assami	<i>xan</i>		
Singhalese	<i>sana, haṇa</i>	the grain of coracan millet	R. L. Turner ³⁶
	<i>hanahu</i>		
		<i>heuna, hane</i>	sunn hemp

SET IV

Avestan	<i>baṇha, bangha</i>	hemp	H. S. Nyberg, M. Eliade W. Eilers ³⁸
	<i>baṇha, bangha</i>	henbane (?)	W. Belardi ³⁹
	<i>baṇha</i>	hemp, henbane	I. M. Steblin-Kamensky ⁴⁰
	<i>baṇha</i>	a narcotic	P. Horn ⁴¹
	<i>baṇha, bangha</i>	an abortive plant, a narcotic prepared from it	Ch. Bartholomae ⁴²
	<i>baṇha</i>	an abortive plant	M. Schwartz ⁴³
Bactrian	<i>mango</i>	hemp (?)	A. Maricq ⁴⁴
	<i>mango</i>	hemp	B. Mękarska ⁴⁵
Pahlavi	<i>mang</i>	deadly poison, henbane	W. B. Henning ⁴⁶
	<i>bang, mang</i>	hemp	W. Eilers, G. Widengren ⁴⁷
	<i>mang, bang</i>	a narcotic, henbane	W. Belardi ⁴⁸
	<i>bang, mang</i>	hallucinogen, henbane	M.. Schwartz ⁴⁹
	<i>ṃang</i>	a narcotic	H. S. Nyberg ⁵⁰
	<i>bang, mang</i>		M. Mayrhofer ⁵¹
New Persian	<i>mang</i>	psychoactive drug	D. S. Flattery ⁵²
	<i>beng</i>	henbane	P. Horn ⁵³
	<i>meng</i>	hemp	
	<i>bang, mang</i>	henbane	P. Mayrhofer ⁵⁴
	<i>bang</i>	Indian hemp	
	<i>bang, mang</i>	hemp	W. Eilers ⁵⁵
	<i>bang</i>	Indian hemp, henbane	I. M. Steblin-Kamensky ⁵⁶
	<i>mang</i>	a variety of Indian hemp	
	<i>bang, mang</i>	henbane	M.. Schwartz ⁵⁷
	<i>bang</i>	hemp	
Tajik	<i>bang</i>	Indian hemp	I. M. Steblin-Kamensky ⁵⁸
Afghan	<i>bang</i>	Indian hemp, henbane	

Wakhi Ishkashmi Shugni Roshani Yazghulami Sarikoli	<i>bang</i>	hemp	I. M. Steblin-Kamensky ⁵⁹	
Kashmiri	<i>bangā</i>		R. L. Turner ⁶⁰	
Khowar	<i>boñ</i>			
Sanskrit (of Ṛg Veda)	<i>bhaṅga</i>	epithet of Soma presumably 'intoxicating'	A. A. MacDonell - A. B. Keith ⁶¹	
Sanskrit (of Atharva Veda)	<i>bhaṅga</i>	hemp	S. Ch. Banerji ⁶²	
	<i>bhaṅga</i>		A. A. MacDonell - A. B. Keith ⁶³	
	<i>bhaṅgā</i>		R. L. Turner ⁶⁴	
Pali	<i>bhaṅga</i>			
Prakrit	<i>bhaṅgā</i>		M. Mayrhofer ⁶⁵	
	<i>bhaṅgā</i>		R. L. Turner ⁶⁶	
Oriya Sindhi	<i>bhaṅga</i>			
Kumauni Nepali Bhojpuri Bengali Assami	<i>bhāñ</i>			R. L. Turner ⁶⁷
Panjabi	<i>bhaṅg</i>			
Hindi	<i>bhaṅg, bhāṅg</i>			
Gujarati Maithili Marathi	<i>bhāṅg</i>			

One may indicate here as well a similar problem - reported further in some details - concerning a few West Semitic terms denoting plants identified with diverse species⁶⁸, mainly with ginger-grass (*Andropogon aromaticus* Roxb., family *Gramineae*), sugar-cane (*Saccharum officinarum* L., family *Gramineae*) and sweet-flag (*Acorus calamus* L., family *Araceae*), but also with still other ones, hemp⁶⁹ among them.

REVIEW OF HYPOTHESES (1)

If we consider the Iranian and Indian plant-names listed above as well as their counterparts in other languages as one corpus of data, it will appear that mainly two long series (with possible subseries) of these appellatives have been so far juxtaposed and interpreted⁷⁰. Several scholars expressed also their opinions as concerns their most plausible provenance, etymology and directions of their diffusion. Some of these scholars have even tentatively suggested a slight possibility of finding links between both these series.

The review of hypotheses, referred to below in details for the needs of further discussion, is not yet comprehensive⁷¹. Besides, some of them have been thoroughly motivated, others only outlined by their authors. But, it seems, that this review will be sufficient to allow the present author to put several questions, directed first of all to linguists, as well as to formulate his own view concerning the alleged or possible ethnohistorical implications of the linguistic phenomena here presented.

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The longest of the above mentioned series of appellatives - to which several Iranian (set I) and usually also some Indian (set III) names are included - provoked also the greatest interest, but at the same time the greatest controversies, which concerned mainly the ultimate provenance of the prototerm. The following hypotheses will visualize the complexity of that problem.

1. A. de C a n d o l l e in his two botanical compendia, in the passages devoted to hemp, did not only pay attention to the problem of its cradle and distribution of its wild forms, but also to the antiquity of its cultivation and its designations in some languages.

In the first of these works (1855) he stated⁷² that neither the Hebrew nor the ancient Egyptians cultivated hemp, as proved by the lack of references to it in the „sacred books” and the lack of its traces in the bandages of the

mummies. As to the testimony of the *Mishna*,⁷³ he remarked that hemp is mentioned there, but only for its textile properties and as a thing little known. Further, he listed (after J. Humbert) its Arabic appellations, thus, the *kan-nab* and its local variants, i.e. *kon-nab*⁷⁴, *han-nab*⁷⁵, *ken-nab* and *kanedir*. Besides, mentioning also their counterparts in Sanskrit, i.e. *bhanga* and *ganjika*, as well as in a few European languages, e.g. Greek/Latin *cannabis*, Breton *kanab* and French *chanvre*, he drew attention to the fact that in all these hemp appellations (he even generalized writing: „dans toutes les langues asiatico - européennes”) the root *ang*, *hang* or *an* is to be found. Finally, attributing to them a Sanskrit origin, he concluded that this fact agrees with the accounts of botanists, which permits one to locate the cradle („le pays primitif”) of hemp.

In his next book (1883) de Candolle repeated all the above mentioned data and their interpretations, adding only a few others. Thus, (following E. Bretschneider) he indicated for instance that hemp is mentioned in the ancient Chinese works⁷⁶, particularly in the *Shu Ching* (*Shu-King*)⁷⁷.

His main contribution to the problem of hemp's dispersal was his supposition⁷⁸ that the Scythians during their migrations carried that plant from Central Asia and Russia to the West, though he dated this event as far back as ca 1500 B.C.. He remarked also that its introduction into Thracia and western Europe would be possible as well during earlier invasions of the Aryans, but in that case, he added, Italy should have been acquainted with it sooner.

2. V. H e h n in his compendium on cultivated plants and domestic animals, from its early editions (e.g. that of 1874)⁷⁹ and in later ones (since that of 1894),⁸⁰ admitted that hemp originated in the area adjacent to the Caspian and Aral Seas as well as in the territories of Sogdiana and Bactria, and that it was cultivated by the Scythians, Medes and Persians („medopersischen Stammen”). Besides, though according to him the use of hemp for textiles was introduced to Greece through Scythia and Thracia, its Greek name *κάνναβις* was of the Median provenance. Afterwards, he indicated that under the corresponding name, i.e. *cannabis/cannabus*, at a comparatively late time hemp reached Italy and Sicily. Further, committing an inexactitude, he stated that this name spread unchanged into all European languages. But he gave only examples from the Germanic languages in which, due to a phonetic shift, it appeared for instance in the forms *hanaf* in Old High German, *hanep* in Anglo-Saxon and *hanpr* in Old Nordic. Finally, he attributed⁸¹ the same provenance to the Indian term for that plant, and in the appended note he

mentioned its Vedic appellative *bhanga*, not giving, however, any argument supporting such a supposition.

3. A. A h l q v i s t in his work about the „culture-words” in the West Finnic languages (1875) reviewed⁸² hemp names current among their particular groups showing their great diversity. First, after mentioning two names of Swedish origin applied in Finland, i.e. on the West *hamppu* and on the East *liina*, he drew attention to the fact that in the Lappish language two original appellations of that plant, i.e. *arpo/arppo* and *ruoives*, have been attested. Then, he stated that hemp names applied by two other groups of peoples of Finnic stock, i.e. the Mordvin *kañt/kañt* and possibly also the Cheremis (i.e. Mari) *kyñe* as well as Estonian *kanep*, Livonian *kanīp* and Vote⁸³ *kaniva*, have an Indo-European provenance, these latter directly from the Latvian *kañņepes* (recte: *kañepes*). Simultaneously he emphasized an affinity of that name with Latin *cannabis*, Slavic *konoplja*, Swedish *hampa* and Old German appellatives - Old Nordic *hanpr* among others.

Afterwards, he pointed out that two other peoples (belonging also to the Finno-Ugrian subfamily), living in a more northern zone, had shifted their own terms denoting nettle, being their wild grown fibrous plant, onto hemp, with which they became acquainted later by the Russians. This concerns namely the Votyak and Zyryan *puš* and *piš* respectively, but also the Vogul *panla*, *ponal*⁸⁴ and Ostyak⁸⁵ *pōlīn*, *pōtlen*. Besides, he gave an example of yet another association of two fibrous plants, remarking that in the northern Ostyak dialect *wan pōlīn*, the term denoting flax, literally means ‘short nettle’. Finally, he adduced some Finnish designations of flax, i.e. *pellava/pellavas*, which according to him seem to be also of the same provenance as the above mentioned Ugrian names for hemp, and additionally also the Vepsian⁸⁶ term *pelvas*, denoting that plant.

4. F. K l u g e in his etymological dictionary of the German language (1882) in the entry⁸⁷ concerning hemp („Hanf”) first mentioned diverse variants of that plant's name in a few German languages, Gothic **hanaps* among them. Then, he stated that a common view according to which that name was borrowed from South European languages (in connection with this he adduced the Greek and Latin terms for hemp) is not to be supported. Besides, juxtaposing the Greek *κάνναβις* with the Gothic **hanaps*, he remarked that the shifting of the consonant, to be seen in that last word, proves that already ca 100 B.C.⁸⁸ it was assimilated by the Germans. Further, after quoting and, it seems, accepting V. Hehn's view on the location of the hemp's cradle, he suggested a possibility that the Germans, while migrating from Asia into

Europe, could have become acquainted with that plant and its cultivation in the environs of the Aral Sea, and could have borrowed its name from the same people from whom the Greeks obtained their term.

Finally, after indicating the Old Bulgarian *konoplje* and Persian *kanab*, he assumed that the word in question - he meant here obviously the prototerm from which all the above mentioned appellatives might have been derived - does not seem to be purely Indo-European („Es scheint nicht echt idg. zu sein”).

5. O. S c h r a d e r in five publications gradually developed and in some phase of his inquiries modified his view on the origin of the European hemp names he considered.

Thus, in his early linguistico - historical work concerning the antiquity of the Indo-Europeans (1883), after mentioning Greek *κάνναβις*, Latin *cannabis*, Old High German *hanaf* and Old Slavic *kanoplja*, he stated⁸⁹ that the ultimate source („Der Ausgangspunkt”) of these words, being in his conviction of an oriental origin, was Sanskrit *çaṇá*, also meaning ‘hemp’. In the next, much enlarged and corrected edition (1890) of the same work he considered⁹⁰ a wider set of European hemp names - adding among others Old Nordic *hampr* and Anglo-Saxon *hænep* - and changed his view as regards their alleged derivation. He inclined now to admit that the term for hemp spread among the Slavic and German peoples at a very early time and originated from the same source as the Greek *κάνναβις*. He concluded also that this unclear word („dunkle Wort”) came down from the land of the Scythians. Furthermore, he denied the possibility that European hemp appellatives had been related in remote times („urverwandt sein”) with the Sanskrit term *çaṇá*. He advanced also the supposition that to that latter name must correspond, instead, the Old Slavic term **sonopu*, for which reconstruction he did not put forward, however, any argument.

Somewhat later on, in a contribution appended to V. Hehn's sixth edition (1894) of his compendium on cultivated plants and domestic animals, Schrader considerably enlarged the set of juxtaposed data⁹¹. Thus, besides those, he referred to previously, from amongst the Indo-European hemp appellations he considered also Lithuanian *kanāpis*, Prussian *konapios*, Albanian *kanep*, *kerp*, as well as Armenian *kanaφ* / *'kanep*’, New Persian *kanab*, Kurdish *kinif*, suggesting for these latter their direct derivation from the Greek *κάνναβις*. As regards Indian (i.e. Sanskrit) *çaṇa* he remarked only briefly that it is congruent with the above listed names, and compared it with the Ossetic word *san*. In his supplement to the relevant Hehn's note he pointed

out⁹², instead, the Thracian word *σάναπαι*, said to denote drinks, and emphasized that with its first component corresponds just the Indian *çaṇa* in its meaning ‘beverage made from the hemp-seeds’ and Ossetic *sanna*, *san* ‘wine’. Besides, having in view the Scythian term *σάνναπτιν*, he remarked that the Thracian term may be one of many Iranian loan-words to be found in that language. One should add that Schrader did not yet indicate here the sources in which both these terms, rendered in Greek transcription, have been adduced.

In the afore mentioned appendix Schrader considered⁹³ also a few Finnic (*sensu largo*) hemp appellations, i.e. the Cheremis *keñe*, *kiñe* and Mordvin *kañtf*, *kant* as well as the Livonian *kanīp* and Estonian *kanep*, accepting W. Thomsen's⁹⁴ derivation of these two latter appellatives from the above reported names in the Baltic languages. He adduced likewise some terms in the Turkic languages, i.e. *kin-dür*, *ken-dir*, *kan-dyr*. (the latter said to be the Chuvash variant of that appellative), and indicated their Bulgarian derivative *kenevir*. As prototerminals underlying that series of names, and according to him evidently recognizable in some of them, he suggested the forms **kanna* and **ken*. He concluded⁹⁵ that hemp names in diverse Indo-European as well as „Ural-Altaic” and „Turko-Tatar”⁹⁶ languages derive from the same source and possibly some of them independently of the others.

As far as the Greek term *κάνναβις* is concerned, he found it composite and drew attention to its second morpheme, i.e. *-βις* (he gave also its variant *-πις*) as being very close to Zyryan and Votyak names *pīš*, *puš*, to which (following A. Ahlqvist⁹⁷) he attributed the basic meaning ‘nettle’, but secondary also ‘hemp’. In connection with this he pointed out the gloss explaining an Anglo-Saxon designation of hemp, i.e. *cannabum hænep vel pis*, to be found in the vocabulary of T. Wright and R. Wülcker⁹⁸.

A few years later, in the first edition (1901) of his lexicon Schrader repeated the bulk of data considered in the above mentioned contribution. But simultaneously, supporting his view about the common origin of the North European, Greco-Latin and some Finno-Ugrian hemp names, he emphasized⁹⁹ that they all probably derived from an East European source. Further, including to that series also the Armenian and New Persian terms for hemp, he stated¹⁰⁰, however, that the language from which they directly derived is yet unknown. As concerns his hypothesis about the provenance of the term *κάνναβις*, he defined now as Greco - Thracian¹⁰¹, he suggested its earlier form **κάννα - πις*. Then, still considering a possibility of its correspondence to Zyryan and Votyak appellations of hemp, he found that it would mean, therefore, ‘hemp-nettle’. Finally, returning to Sanskrit *çaṇá*, he remarked that it

seems to be connected with the group of names to which belong among others the Cheremis *keñe*. He wrote¹⁰² namely: „...es scheint, dass auch der i n d i s c h e Name des Hanfes, scrt. *çaṇā* - an die oben besprochene Gruppe von ceremissisch *keñe* etc. anzuknüpfen ist, indem der Anlaut des fremdes Wortes hier als palatales *k* gehört wurde". Besides, in connection with the Ossetic word *san* 'wine', he compared the Scythian intoxication with hemp to that being just the effect of drinking wine.

Still later on, in the first volume of the second edition (1917 - 1923) of his lexicon, Schrader repeated almost all data and their interpretation from the former edition. As to the word *xávvaβis*, he defined it here¹⁰³ either as a Scythian or Thracian term for hemp. Nevertheless, he concluded¹⁰⁴ that the Scythians had transmitted, it seems, hemp cultivation to the Thracians, from whom it spread still farther within Europe. Besides, in the same and the second volume (1929) of that work he indicated¹⁰⁵ closer counterparts to Sanskrit *çaṇā*, seeing them in the terms *σαναπτιν*, mentioned allegedly by Hesychios¹⁰⁶ and *σαναπαι*, to be found in one of the *Scholiae* (II, 948)¹⁰⁷ to the *Argonautikon* of Apollonios Rhodios. Thus, in his conviction both these words also denoted hemp, the first of them being its Scythian designation, the second one a corresponding to it Thracian term.

6. Th. P. K e p p e n in his paper (1886) discussing very thoroughly the origin of the Indo-European hemp appellations stated first¹⁰⁸ that, contrariwise to China and India, in ancient Egypt no hemp was known. For Palestine, instead, he indicated the testimony of the *Mishna*¹⁰⁹, where some references to hemp fibres are to be found, but simultaneously emphasized that acquaintance with that plant was there comparatively late. Then, he juxtaposed¹¹⁰ a long list of hemp names in diverse languages, containing several appellatives or their variants (if correctly transcribed) not considered by other authors. Thus, for instance, side by side with the usually adduced Greek term *xávvaβis* he gave also its variants *xávaβis* and *xávvaβos*; among the Romanic names the Rumanian *kynipy*, *kynypa*; among the Celtic ones the Armorican *kanab* and Breton *canab*, *kanas*; among the Germanic ones the Dutch *kennep*, *hennep*, *hennip* and two Old Scandinavian forms *hanpr*, *hampr*; among the Slavic ones the Russian *konopel'*, *konoplja*, *konop'*, White Russian *kolopnja* (with a metathesis of *n* and *l*), Bosnian *konopglje*, High Lusatian *konopje* (recte: *konopej*), *konopa*, *konopy*; and among the Baltic ones (he cited Lithuanian) the Samogitian *kanape*. Next, he mentioned Armenian terms, *ganep*, *kanep* and Sanskrit *çana*; then, among the Iranian terms the Ossetic *gan'*, *gana* and Persian *kanab*, *kenew*, *kanû*; and among the Semitic ones (he

cited Aramaic) the Arabic *kinnab*, *kunnab*, Syrian *kanba*, Chaldean *kanbun*, and Hebrew *kannabus*. As regards the Turkic names he indicated the Turkish *kenewer*, *kenewir*, Chuvash *kander'* and labeled by him as „Turko-Tatar” *kendiros*h and *kinder'*/*kender'*. He also noticed that the latter one had been shifted in Turkestan onto another fibrous plant, i.e. *Cynanchum acutum* L.¹¹¹. Among some Finnic names, instead, after Livonian *kanîp* he mentioned even three Estonian terms, i.e. *kanep*, *kannep*, *kannepid*, in connection with the first of them emphasizing its Latvian provenance. Finally, as concern the Caucasian (strictly Kartvelian) languages he drew attention to the Georgian *kanaphi* and Imeretian *kanapi*, also considering them as loan-words.

Afterwards Keppen began to comment upon some other scholars' views and advanced his own supposition concerning the prototerm of that series of names.

As regards for instance the early opinion of O. Schrader, who saw an initial form of that series in Sanskrit *çana*, he stated¹¹² that one cannot deny its affinity to the above listed words. But, having noticed that this term shows a characteristic for Sanskrit replacement of *k* by the spirant *ç*, he seemed to deny the priority of that term. He also disagreed with A. Fick¹¹³ according to whom an Indo-European form *kana*, deriving in that scholar's view from the root *kan* (or *ka*) 'to prick' and meaning therefore 'a prickly plant', was the prototerm of the discussed series of hemp appellations.

Further, Keppen set forth¹¹⁴, with several arguments, his own hypothesis admitting that the sought prototerm is to be found in the Mordvin language, which retained, in general, many words that disappeared in other tongues belonging to the Finnic stock. It concerned namely the hemp appellation, just representing for him an original, not borrowed, word, current in the Mordvin language in a few variants, i.e. in the Erza dialect as *kan't*, while in the Moksha dialect as *kanf'* (spelled sometimes *kanf*). He emphasized also a striking resemblance of that latter form to the corresponding German name *Hanf*. As to the Russian term *konoplja*, it could derive in his view from the forms *kanf'* or *kanfa*, which he considered as earlier ones. In this connection he remarked that 1200 years ago the Mordvin term for hemp could had been slightly different, maybe *kanatf'* or *kanaf'*, thus being closer to diverse Indo-European names for that plant. He concluded that Slavic, Baltic and Germanic tribes, dwelling previously, in his conviction, in the vicinity of the Mordvins, could have got from them not only hemp but also its appellation.

As concerns the Greek term *xávvaβis*, mentioned by Herodotos, Keppen suggested a possibility, that during that author's sojourn in the south of

(present) Russia, he could have been acquainted with it by the Mordvins or other akin tribe, and that later on he transmitted it in a form modified following to the Greek fashion. Keppen indicated too that Greeks under the general term „Scythians” could likewise embrace not only an Iranian people but also other peoples, and supposed that there could have been among them many Finnic tribes, that once occupied some territories lying farther to the south and west. He considered also a possibility that the Mordvin *kantf*’ and above mentioned Indo-European terms had a common origin in the distant past when Finnic and Indo-European peoples, according to his view, still formed a unity. Even the fact that the name *kantf*’ appears only in the Mordvin language, while in other Finnic languages other hemp appellations are attested, did not contradict for him such a remote relation. Nevertheless, he found the former solution of the discussed problem more plausible. A strong support of it he saw again in the Mordvin words *kant*’, *kantf*’, evidently deriving, he emphasized, from the purely Finnic root *kinne* ‘fibre, gut’. In connection with this he drew also attention to the fact that the Hungarian language has still retained the words *kanaf* ‘fibre’ and *kanafos* ‘fibrous’. Furthermore, the originality of some other cultigens’ appellations in the Mordvin language, the alleged ancientness of plants’ cultivation by the Mordvins, and the area of distribution of wild hems, have been also considered by him as favouring his hypothesis.

Finally, having in view V. Hehn’s supposition and simultaneously admitting the lack of proofs for the occurrence of wild hems in the Aral-Caspian lowland and in the Afghanistan, the location of that plant’s cradle in the first region Keppen considered ¹¹⁵ as erroneous, while in the second one rather impossible. He supplemented¹¹⁶, instead, the observations of A. de Candolle, referring to the relations of other scientists, particularly concerning European part of Russia, for which that French scholar did not indicate places of undoubted occurrence of wild hems. Being well aware that truly wild forms are not so easy to discern from the turned-wild, Keppen adduced, however, several botanical reports attesting the first of them, as grown in the Kharkov and Orenburg guberniyas.

7. V. T h o m s e n in his study on the contacts between the Finnic and Baltic linguistic stocks (1890), while discussing ¹¹⁷ the problem of the origin of hemp names current in the first of these languages, i.e. Livonian *kanip*, Estonian *kanep*, Vote *kaniva*, *koneva*, and some others, he stated that connections of these appellatives with the corresponding Latvian term cannot be rejected. Then, he pondered on two possible ways of the diffusion of hemp

appellations between the particular languages he considered. First, he found possible the transmittance of that plant’s appellative from the Latvian to the Livonian and Estonian, and afterwards to the Vote, but he did not exclude also that the tongues of that Finnic group borrowed it directly from the Russian, and then transmitted it to the Latvian. Instead, the *sensu stricto* Finnish name of hemp, i.e. *hamppu*, he found to be a loan-word from the Swedish. Finally, indicating the Mordvin names of that plant, i.e. Moksha *kañtf* and Erza *kañt*, he concluded that, maybe, like their Cheremis counterparts *keñe*, *kiñe*, they all derived, either directly or in another way, from the same Scythian source from which derived likewise the Greek *χάμβαβις* as well as Slavic, Lithuanian (he meant here most probably Baltic in general) and Germanic hemp appellations. He closed his comments pointing out for comparison hemp names in a few Turkic languages, and the Magyar term *kender* borrowed from them.

8. W. T o m a s c h e k in his study on ancient Thracians (1894), before formulating his own view referred to Kluge’s hypothesis ¹¹⁸. Further, pointing out ¹¹⁹ the role of hemp in the Thracian weaving, he stated that the cloth and the word denoting it could have been taken by the Germanic as well as the Balto-Slavic („Litu-Slaven”) peoples¹²⁰ from the Thracians. He found, however, that there is no need to admit that this term (he meant here obviously the Greek form of that name, i.e. *χάμβαβις*) either in Thracia or in Greece („Hellas”) had arisen. He supposed, instead, that it belonged to the commercial language of the Karians and Phoenicians, who brought the cloth in question together with its designation from the North and subsequently spread everywhere. Then, accepting the view that this term is composite, he also juxtaposed its first morpheme *χάμβα* with Hebrew *kanah* and Assyrian *kanu*, both meaning ‘reed, plaitwork’. He indicated likewise, though without any documentation, the Sumerian word *gin*, to which he attributed the meaning ‘hemp’. But he emphasized in this connection that he is not able to settle it. Finally, he remarked that Ossetic *ganà*, *gānā* ‘hemp’ seem to derive from the New Persian *kanaf*.

9. H. H i r t in his contribution to the grammar and etymology of the German language (1898), while discussing the Old Germanic loan-words in Balto-Slavic languages, as alleged derivatives of the Gothic **hanaps* ‘hemp’, mentioned ¹²¹ the Old Prussian *knapios*, Lithuanian *kanāpės* and Latvian *kañepe* as well as the Old Bulgarian *konoplja*. Nevertheless, considering the fact that the Slavs lived farther to the east than the Germans, he concluded ¹²² that they must have earlier obtained that plant. He found, therefore, plau-

sible that the Slavic *konoplja* derived from a yet another language, but stated simultaneously that such a provenance has not been proved so far. Besides, he juxtaposed a few Old Germanic appellations, Old Icelandic *hanpr* among them, with the Greek *χάνναβις*. In connection with this he also quoted and commented on R. Much's opinion¹²³, who from the Herodotos' account (IV, 74)¹²⁴ inferred that the Greeks had become acquainted with hemp in the 5th century B.C., and that the Germans might have done so somewhat sooner. Hirt, instead, referring to the same account drew attention¹²⁵ to the purposes to which, according to that report, hemp was used by the Scythians and Thracians, and emphasized that not a single word of Herodotos indicates that its cultivation had been introduced then. He also assumed that both these peoples had been well acquainted with hemp's fibres and the intoxicating power of its seeds, and that for a long time they already might have cultivated the plant. Then, in his work devoted to the problem of the homeland, dispersal and culture of the Indo-European peoples (1907) Hirt supported that view and stated¹²⁶ that the aforementioned account has been repeatedly misunderstood. Thus, the inference that the Greeks just in the Herodotos' time became acquainted with hemp, was found by him to be as groundless as it would be the assumption, based on the same author's other account (II, 92)¹²⁷, that the Greeks had not known of the Egyptian lotus.

10. A. B r ü c k n e r in his book on civilization and language (1901), referring briefly to the question of the foreign provenance of some Polish words, suggested¹²⁸ that the name *konopie* had been borrowed, maybe, from the Daco-Thracian peoples. Much later on, in the etymological dictionary of the Polish language (1926) he changed and developed his view¹²⁹ as regards the ultimate provenance of that term. Thus, in his conviction the alleged prototerm had the form *kanabis* and was the genuine Proto-Finnic designation of hemp. In connection with this he recalled also the hypothesis suggesting that it might have been composed from two morphemes, each of them deriving from other Finnic peoples' appellations of hemp, albeit he stated that such a composition is striking by its oddity. In any case according to Brückner that appellative in the form *kannabis* was borrowed first by the Scythians from whom it spread apparently all over Europe. He inclined also, it seems, to admit¹³⁰ - though he treated it as a problem to solve - that Slavic peoples were the first who introduced it and transmitted it further, which gave subsequently the Lithuanian *kanapės* / *kanape* and Prussian *knapios* as well as, through an early form **kanap*, the German *hanaf*.

11. J. H o o p s in his work devoted to the forest-trees and cultivated plants of the German past (1905), while writing¹³¹ about hemp, followed for the most part O. Schrader's view¹³², but added also some new elements to the discussion and made precise some interpretations. Thus, after stating the lack of acquaintance with that plant in the ancient Semitic-Egyptian cultural area, he admitted like G. Buschan¹³³ that the cradle of its cultivation is to be likely looked for in the Northwest or Central Asia, maybe even in southern part of Russia. Besides, he remarked¹³⁴ that in the 4th or 5th century B.C. probably the Germans received hemp together with its name from the same Southeast European people from whom the Greeks obtained it directly or indirectly. He found it¹³⁵ possible as well that comparatively lately it reached the northern branch of the Germans, and that the Anglo-Saxons might have been acquainted with it already before their exodus, i.e. the final great migration. One should also notice that he considered already an enlarged list of the European names of that plant, adding among others Old Swedish *hamper* and Danish *hamp*. As regards the etymology of the Greco-Latin name *cannabis* Hoops positively evaluated O. Schrader's hypothesis according to which it was composed of two morphemes, corresponding to the Cheremis and Votyak / Zyryan hemp appellations respectively, the latter denoting originally the nettle. In his later published lexikon (1913-1915) he supported¹³⁶ that hypothesis still more, pointing out that the alleged original meaning of the name *cannabis* transmitted to the Greeks, being 'hemp-nettle' fitted well, he emphasized, with the attribution of hemp to the family *Urticeae*. But, judging from the whole context of his statements, in the first component of that alleged combination of two appellatives he saw a genuine „Turko-Tatar” name of that plant, which subsequently has given the Cheremis *keñe*, *kiñe*, and has been joined with the Zyryan / Votyak *pış*, *puş*. He found plausible, therefore, that the Indo-Iranians during their migration up to Asia just from the „Turko-Tatar” peoples („von turkotatarischen Völker”) received hemp and borrowed from them its name.

One should add that Hoops agreed also with the view admitting the correspondence of the Cheremis hemp names *keñe*, *kiñe* with one of its appellations in Sanskrit, he gave in the form *śaṇās*. Then, comparing that appellation with the Balto-Slavic hemp names, having an initial *k* instead of *ś*, he inferred that these latter had not been inherited from the time of the Indo-Germanic (i.e. Indo-European) community, but acquired latter on as loan-words. Besides, he juxtaposed the Latin forms *canapis* and *canape*, that have been also attested, with some other European hemp names, thus Rumanian *canapa*, Albanian *kanep*, Old Church Slavonic *konoplja* and Old Prussian

knapios among others. In conclusion, having most probably in mind the prototerm of that series, he wrote that all these appellatives indicate the form with *p*.

12. Z. G o m b o c z in his study on the Bulgarian and Turkish loan-words in the Hungarian language (1912), in the entry devoted to hemp's nomenclature, first mentioned¹³⁷ its names attested for the Old Turkic from the 13th and 14th centuries, i.e. *kender* and *kendur*. Further, he listed several other appellatives, thus the Old Chuvash **kändir* - occurring also in Osmanli, Altaic, Teleut, Uighur, Taranchi, etc. - then, a term to be found in the *Codex Cumanicus*, i.e. *chendir* as well as Bashkir *kinder*, Kirghiz *kendir*, Koibal *kendör*, Nogay *kyndyryš* and others. Besides, having in view the simple Ossetic term *gän*, he stated that the above mentioned appellatives must be treated either as derivatives or as composite designations. He also remarked that they are in some relation to the Mordvin *kañč* (Erza), *kañt'f* (Moksha) and Cheremis *kiñe* (W.), *keñe* (Bergtscher.). Finally, indicating a few European and Southwest Asiatic names of hemp (even the Kurdish *kinif* among them), he quoted O. Schrader's supposition about the ultimately Finnic (*sensu largo*) origin of all of them. He drew attention¹³⁸, however, to the fact that Votyak *piš*, *pěš* and Permian *poš* do not denote nettle, for which are used respectively the names *pušñer* and *pěčor* (while in Zyryan *petšör*, *petšer*) but also hemp. Thus, he concluded that in the case Schrader's derivation of *κάνναβις* from a Finnic source can be retained, that appellative should not be translated 'hemp-nettle' but 'hemp-hemp'. In connection with this, in a much later publication (1928), Gombocz advanced the supposition¹³⁹ that, maybe, either O. Schrader or V. Hehn were misled by A. Ahlqvist¹⁴⁰ who admitted that Votyak and Zyryan *puš*, *piš* meant simultaneously 'hemp' and 'nettle'. Gombocz stated¹⁴¹ here also that there are no proofs that Cheremis *kiñe*, *kēñe* as well as Mordvin *kañč* (Erza) and *kañt'f* (Moksha) belong to the original basic vocabulary of the Ugro-Finnic (= Finno-Ugrian) languages. He followed, therefore, W. Thomsen's view¹⁴², according to whom these appellatives may directly derive from the Scythian language. Furthermore, he pointed out that there is no common appellative for hemp in these languages, as Lappish *hampa* and Finnish (*sensu stricto*) *hamppu* are borrowed from Scandinavian source, Hungarian *kender* from Turkic, while the still distinct Ostyak *pōlen*, *pudēn* and Vogul *ponäl* do not seem to be loan-words.

13. S. A g r e l l in his contribution to the history of the Slavic phonological system (1918), after juxtaposing the hemp appellations in some languages of that stock and pointing out¹⁴³ that one attempted usually to see in them a

loan-word, he found yet the problem of its provenance to be so far unsolved. Thus, he excluded its derivation from the hemp name in either the Greek or in the Germanic languages, indicating that to the first of them such an appellative was comparatively tardily introduced, while in the latter it was not a genuine word. Then, he emphasizes that the often mentioned Old Indian *çañāḥ* 'a kind of hemp' and Ossetic *san* 'wine' are still less suspected in that respect. Instead, the fact that the hemp appellative in question occurs in all Slavic tongues, he considered as proof of its very early appearance in these languages. Though Agrell repeatedly referred to J. Hoop's statements and suppositions, he advanced also his own hypothesis. So, he admitted that Old Indian *çañā*, Ossetic *san* and Slavic *kono-* (being the first component of the hemp names) can be derived from a common protoform **kano*. Nevertheless, he saw two possibilities of the origin of this initial morpheme, i.e. either as a very ancient loan-word or as a word belonging to the Indo-Germanic (i.e. Indo-European) „Ursprache” in which it did not, however, designate hemp but a plant similar to it¹⁴⁴. He meant here namely flax since a deep past known to the Indo-Europeans and also used by them for its fibres. As concerns the second element of the Slavic hemp names, though he indicated its possible derivation from an alleged Proto-Slavic („urslavisch”) *-piš* (?)¹⁴⁵, following O. Schrader, he also admitted that it might well have some connection with the Zyryan and Votyak *piš*, *puš* 'hemp, nettle'. As regards the Greek name *κάνναβις*, he found it¹⁴⁶ enigmatic and not necessarily borrowed directly from the Slavs, but introduced through the intermediation of another people.

14. B. L a u f e r in his study on the Chinese contribution to the civilization of ancient Iran (1919) advanced the supposition¹⁴⁷ that designation of hemp in the European languages (he meant here the common prototerm) „is presumably a loan-word pointing to Finno-Ugrian and Turkish”, and that the common Old Turkish name „of the type *kändir*”, denoting that plant, has some relation to its Finno-Ugrian appellations.

Laufer considered also as most probable that the Scythians introduced hemp from Asia into Europe.

15. J. R o z w a d o w s k i in a brief contribution (1925) drew attention¹⁴⁸ to the fact that for the languages forming an old linguistic stratum in the Pontic area - to which he included the Thracian, the Phrygian, the Armenian and even the Tokharian - characteristic was devoicing of the earlier sonorous consonants. Then, giving a few examples of that shifting, he indicated¹⁴⁹ *κάνναβις* 'hemp' as Thraco - Greek appellative, that had been adapted, in

his view, by the Germans in the form **hanapiz* = **kanapis*. He closed that remark emphasizing that all Slavic terms for that plant, e.g. Polish *konopie*, contain *-p-*, thus unlike their counterparts in the Thracian, Greek and Germanic languages.

16. J. L o e w e n t h a l in a contribution (1926) to his comparative studies concerning some selected Indo-European lexemes, the word *κάνναβις* treated ¹⁵⁰ as a Scythian term for hemp. He stated also that like Assyrian *qunuba*, *qunnabu*, it derived from an alleged Ancient East Iranian form **konaba*, 'hemp, hemp-intoxication', according to him connected also with the Ancient Indian *śaná-s*, denoting a kind of hemp, and with Ossetic *san* 'wine'. But simultaneously he found also plausible the relation of *κάνναβις* with the Greek *κάναβος* 'turmoil' and he drew attention to the fact that a tearful outburst is just characteristic for the hemp-intoxication, attested already by Herodotos (IV, 75) ¹⁵¹. Thus, he found possible an Indo-European protoform **kon-mbos* 'turmoil, hemp-intoxication' and in this connection he indicated the Indo-European root **kên* 'to be loud'.

17. V. K i p a r s k y in his paper on the German loan-words in Slavic languages (1934), in the entry for **konop'a*, first juxtaposed ¹⁵² a few hemp appellations in some of these languages. Then, giving some, mainly phonological arguments, he did not find plausible a remote affinity of these appellations with the Ancient Indian term *śanaḥ* denoting 'a kind of hemp'. Further, judging from the whole context, he evidently inclined to the opinion of P. Ravila, communicated him personally, who rejected the derivation of the hemp names in question from the combination of the Cheremis *keñe* and Zyryan *pīš*. Advancing finally his own view ¹⁵³ Kiparsky admitted two possibilities of an indirect derivation of the Slavic hemp appellations: one from the Scythian term that could have been *kanab* (*κάνναβις* of Herodotos), another from the Armenian *kanap* (transmitted by a Turkic people).

18. S. B e n e t in her three papers dealing with the folk beliefs and custom connected with hemp, devoted some room to the controversial problem of the antiquity of that plant's cultivation and its ancient names in the particular regions of the Near East.

Initiating the linguistic line of these inquiries in a preliminary report (1935) ¹⁵⁴, besides the Semitic designations of that plant (e.g. Assyro-Babylonian *kannab* ¹⁵⁵) she considered also the North European ones (e.g. Old Slavic *konopla*) as well as its Sanskrit and Greek appellations (i.e. *çana* and *κάνναβις* respectively). She stated ¹⁵⁶ likewise that in all these languages

the words denoting hemp has a common root *kan*, having also the second meaning, i.e. 'reed'. Focussing further her attention on the Greek term, she rejected the view of O. Schrader and his followers, who attributed to that word a provenance from the combination of two hemp names, each of them applied by different Finnic peoples. She disagreed too with T. Benfey ¹⁵⁷, who to the ending of the Greek term, i.e. *-βις*, had to assign the analogical function to that played by the Sanskrit suffix *-bha*, i.e. designation 'similar to'. She accepted, instead, his translation of the Greek word *κάννα* (= Latin *canna*) as 'reed', but she added also as its second meaning 'hemp'. She concluded that the term *cannabis* (she meant of course the Greek form *κάνναβις*) was neither of Finnic nor Sanskrit origin. Then, as regards the provenance of that appellative she advanced, with many arguments her own hypothesis.

Thus she pointed out ¹⁵⁸ that in the Hebrew original of the New Testament and in its Aramaic translation the words *kane* and *kene* respectively, often joined - the first of them with *bosem* ¹⁵⁹, the second one with *busma*, adjectives meaning 'odoriferous, aromatic' - are to be repeatedly found. She stated also that her studies permit the assigning to the Hebrew *kane bosm* and Aramaic *kene busma* the meaning 'hemp'. Further evolution of that designation in Benet's view gave later on *kanabos/kanbos*, encountered in the *Mishna* ¹⁶⁰. The striking similarity of that appellative to the term *cannabis*, she considered as Scythian, led her to attribute it a „pan-Semitic” origin ¹⁶¹. Finally, she suggested that the Scythians could obtain it from the Mitannians („Mitaines”) ¹⁶² with whom, she wrote, they had been probably related and who could easily have borrowed it from the neighbouring Semites. But she allowed too a possibility that these latter could spread this appellative during their migrations through Asia Minor.

In the next, more comprehensive study (1936) ¹⁶³, after reporting the botanical traits and geographical distribution of diverse hemp forms, the greater part of it Benet devoted to the detailed description of the multifarious role that plant played in different cultures. She added there also some new items to the discussion of the ethnobotanical and palaeolinguistic data concerning the Near East.

First, she briefly mentioned ¹⁶⁴ some alleged evidence of the acquaintance with hemp in Egypt - mainly that adduced by E. Unger - and drew attention to the account of Diodorus Siculus ¹⁶⁵ about the women from the Thebes, said to know the secret of preparing a psychotropic beverage from that plant. Then, she recalled the assertion of B. Meissner ¹⁶⁶ according to whom since the 7th century B.C. hemp was known in Assyria and Babylonia and used there as perfume and incense. Having that in view, despite the conviction of

V. Hehn, O. Schrader, G. Buschan¹⁶⁷ and others, she found as not very probable the lack of acquaintance with hemp in Palestine. She quoted¹⁶⁸ even four passages from the Old Testament where in its Hebrew original a plant named *kane* or *kene* (sometimes with an adjective *bosem/bosm*), usually identified with an odoriferous reed, is briefly mentioned. She gave¹⁶⁹ also several arguments speaking, in her opinion, in favour of the supposition that in these contexts these names denoted hemp, though she agreed that the original meaning of *kane* was most probably 'reed'. As regards the hemp name occurring in the *Mishna*, its second variant was transcribed now by her¹⁷⁰ in the form *kanabus* (instead *kanabos*). One should still remark that Benet enlarged here¹⁷¹ the set of the Near Eastern names of hemp containing the root *kan*, adding to the formerly adduced Assyro-Babylonian term - now correctly given as *qunubul/qunnabu* - also the Chaldean *kanbun*, and indicated likewise the Arabic *kannab*, *kunnab*, and Persian *kanab*. Moreover, she indicated also two other alleged reference to hemp: one said to occur in an Assyrian letter of the 9th to 7th centuries B.C. (edited by R. F. Harper in 1896), another in an apocryphal text concerning Salomons's testament (mentioned by G. Salzberger in his book of 1912).

Further, she inserted a long list¹⁷² of Indo-European, Finno-Ugrian, Turkic and Semitic names of hemp, based evidently in a major part on their Th. Keppen's juxtaposition. She criticized¹⁷³, however, that scholar's hypothesis¹⁷⁴ concerning the prototerm of the whole series of these appellations. She stated namely that Keppen's supposition had no historical grounds. Furthermore, admitting that the Germans were never neighbours of the Mordvins, she inclined to explain the great mutual resemblance of hemp names of both these peoples by their derivation from the same source. As to the Slavic designation of that plant, she assumed that most probably it had been borrowed from the Scythians. As concerns, instead, the ultimate provenance of the prototerm in question, she repeated¹⁷⁵ all her former arguments, insiting on its Semitic origin.

In her much later paper (1975)¹⁷⁶ Benet once more strongly opposed those scholars¹⁷⁷ who claimed that neither for Egypt nor for Palestine acquaintance with hemp and its use in the antiquity is attested. Returning further to the testimonies of the Old Testament, she emphasized¹⁷⁸ that references to hemp concern it both as an incense and intoxicant. Then, she reported again the relevant passages, adding still another one and giving some more details¹⁷⁹. Thus, she pointed out that the term *kaneh* was incorrectly translated as 'sweet cane' (Isaiah 43, 24; Jeremiah 6, 20) or 'calamus' (Ezekiel 27, 19; Song of Songs 4, 14), while *kaneh bosm* as 'sweet calamus' or 'aromatic

reed' (Exodus 30, 23)¹⁸⁰. Besides, considering the evidence adduced by S. Klein, according to which the religious duties of the Hebrew compelled them to bury their dead in the *kaneh* shirt, she found¹⁸¹ plausible that this term also in that context denoted rather hemp than reed. As regards the references to hemp in the *Mishna*, side by side with the term *kanbos*, once more she indicated¹⁸² its variant, but now in the form *kannabus*. In her conclusions she uphold with some corrections the main premises and assumptions on which she based her former view concerning the provenance of the term *κάνναβις* which had been attributed, she wrote¹⁸³, in the „widely - held opinion” to the Scythians. In connection with this she stated¹⁸⁴ that this people from at least the middle of the 2nd millenium B.C. participated in trade „alongside with the ancient Semites”. Then, she remarked that during their invasion of Palestine in the 7th century B.C. many Scythians settled in the city Bethshan, during the hellenistic period renamed even Scythopolis. Finally, she assumed¹⁸⁵ that after borrowing in the Near East the word denoting hemp and some forms of its use, i.e. for ritual and narcotic aims, the Scythians transmitted them subsequently to the peoples with whom they came into contact during their raids.

19. M. R ä s ä n e n in his article concerning the Volga-Bulgarian language (1946) referred¹⁸⁶ incidentally to the ultimate origin of the name *Hanf* (having in mind, it seems, the whole series of related Indo-European hemp appellations). As regards O. Schrader's attempt to prove here a Finno-Ugrian provenance, he defined it as ineffective and stated that this often repeated view should be given up at last. In connection with this he indicated also its similar assessment by O. Ravila. Räsänen expressed likewise his own opinion according to which the aforesaid word is to be derived from the Persian *kanab*. For comparison he indicated first a similar Kirghiz and Turkmen appellative *kanäp*, denoting flax, and attributed to it the same provenance. Further he adduced also some other Altaic as well as Finno-Ugrian terms, thus e.g. Turkish *kendir*, Mongolian *kenžir*, Hungarian *kender*, Mordvin *kañtf*, Cheremis *kiñe* - all denoting hemp, and then Votyak *kenem*, Zyryan *ken-tus* - designating hemp-seeds. For comparison, instead, he indicated among others the Ossetic *gän* 'hemp'. Moreover, (following K. Tallqvist) he drew attention to the term *kunibu*, treating it as Sumerian and evidently including it to the above mentioned series of names. Furthermore, in his later contribution (1948), explicitly attributing it the meaning 'hemp', he emphasized¹⁸⁷ that this plant was already known in ancient Mesopotamia.

20. F. Sławiński in his paper devoted to the problem of the etymology of three lexemes in the Polish language (1946), one of them denoting hemp (i.e. *konopie*), discussed the question of the provenance of the latter and some cognate words. First, he juxtaposed¹⁸⁸, however, a few appellations of that plant in the Turkic languages - one of them being the Chuvash *kan-dyr* - with their counterparts in the Cheremis, i.e. *kehe*, *kihe* (he derived from **kana*, **ken*) and the Old Indian, i.e. *śaṇa* as well as with the Ossetic word *san* (= *k'*). Then, emphasizing that the corresponding Old Slavic terms are also related, he transcribed them in the form **kon-op-ъ* || **kon-op-lja* and argued that the same root **kon-* is to be found even in the Polish word *kądział* which originally had some connotations concerning the yarn. Further he remarked¹⁸⁹ that etymological inquiries tended up to then to prove that the above mentioned Old Slavic appellatives, Old German *hanaf* (= *hanafiz*) and Greek *κάνναβις* / *κάνναβος* (with Jonian variants *κάνναβιος*, *κάνναβιδ*) derived from an ultimately common Finnic source. He also found many reasons to admit such a parallel provenance, in spite of A. Brückner's supposition that the German term was a loan-word from a Slavic language. In connection with this he drew attention to the fact that Germanic tribes, for instance the Bastarnae, already in the 5th century A.D. moved very far to the east, and therefore could have borrowed hemp appellative independently of the Slavs. He recalled also that, through the soundshifting to be seen in the Germanic hemp name, it has been settled that this borrowing took place in the 5th century B.C. at the latest. Having, instead, in view the account of Herodotos (IV, 74 - 75) attesting for that century the importance of hemp in the Scythian culture, contrary to some opinions considered by him as erroneous, he stated (like H. Hirt)¹⁹⁰ that at that time both the Scythians and the Greeks must have been acquainted with that plant for several centuries already. One may add here, that considering two Old Indian terms for it, i.e. *śanā-h* and *bhang*, its „Turko-Tatar” names as well as New Assyrian and New Babylonian words *qunubu*, *qunnabu* ‘perfume’ - that latter in B. Meissner's opinion also concerning hemp - Sławiński emphasized¹⁹¹ its rather wide distribution in Asia in ancient times.

Sławiński adduced¹⁹² likewise some arguments that may support, in his view, O. Schrader's hypothesis admitting a Finnic provenance of the composite hemp designation used by the Iranian peoples. But, he did not exclude also that transmission of that appellative to other European languages could happen indirectly through such terms as Armenian *kanap'*, *kanep'*. As concerns Schrader's supposition that the alleged Finnic prototerm for hemp had a composite structure, in which the second component originally denoted

‘nettle’, he remarked that a sufficiently clear meaning, i.e. ‘hemp’ itself, of the first component could have resulted in the loss of semantic autonomy by the next one, which became a meaningless suffix. Nevertheless, he pointed out¹⁹³ also Z. Gombocz's distinct view¹⁹⁴ regarding that prototerm, i.e. **kana-pis* as well as the lack of a common appellation for hemp among the Fino-Ugrian peoples. One should add, that much later on, in his etymological dictionary of the Polish language (1958 - 1965) he agreed¹⁹⁵ even that the alleged Finno-Ugrian („źródło ugro-fiń.”) provenance, formerly admitted as ultimate for the prototerm in question, has been proved by Gombocz to be not very probable. Besides, he considered here also as not convincing the etymological suggestions of J. Loewenthal and S. Agrell¹⁹⁶.

21. V. I. Abaev in his etymological dictionary of the Ossetic language (1958) in connection with the terms applied to hemp, i.e. *gæn* / *gænæ* (thus, in two main dialects of that language respectively; rendered also: *gæn* / *gænæ*) indicated¹⁹⁷ the word *kættag* ‘linen’, as deriving in his view from **kæn-tag*, in which the first component had to denote ‘hemp, flax’, while the second one ‘thread, belt’. From the Ossetic locution *gænyston fæu!* ‘overgrow you hemp!’ he inferred, instead, that in the Old Ossetic it concerned the wild form of that plant occurring as a weed.

Abaev adduced¹⁹⁸ also for comparison, as cognate words, the names of hemp in some other languages. Thus, from amongst the Caucasian languages he considered Georgian *k'anapi*, Svanetian *kan* and Abkhasian *a-k_ona* ‘hemp’ (as well as Kabardian *ġanā* ‘skirt’). He listed also several appellatives in the Indo-European languages, for the Iranian ones mentioning the Persian *kanab*, *kana*, Khwarezmian *knb*, Sogdian *kynp'* and Saka *kumbā*, *kanbā*¹⁹⁹. Furthermore, he emphasized²⁰⁰ that in the Mari (i.e. Cheremis) language the hemp names have a simple form *kehe*, *kəhe* and recalled O. Schrader's hypothesis concerning the provenance of the Greek term *κάνναβις*. Having all that in view - as well as the testimonies of Herodotos and Hesychios - he concluded that the prototerm of all these hemp appellations originated in eastern Europe, and that in the Scythian language also occurred a simple form, being in his conviction **kana*.

22. V. I. Lytkin and E. S. Gulyaev in their etymological dictionary of the Komi (= Zyryan) language (1970) in the entry concerning the term *köntus'* / *ken-tus'* (with *tus'* meaning ‘grain’), according to them²⁰¹ applied both to hemp and its seeds, juxtaposed it with its variant in the Yazvinskiy dialect of the same language, i.e. *köntis'* as well as with its counterparts in some other Finnic languages, thus Udmurt (=Votyak) *kenem*, Mari (=Cheremis)

kyñe and Mordvin (Erza dialect) *kanst*'. Besides, as the corresponding nuclear form common for all Permian languages, they suggested the prototerm **ken-* 'hemp'. Then, they briefly remarked that such type of appellatives occur also in the Indo-European, Altaic and still other languages. Furthermore, they advanced a supposition that the names in question derive, maybe, from the Mesopotamian languages, and in connection with this they indicated as Sumerian term for hemp the word *kunibu* (admitted usually as an Akkadian term).

23. G. C l a u s o n in his etymological dictionary of the "Pre-Thirteenth Century Turkish" (1972) admitted²⁰² as „unlikely” that hemp has been „indigenous in the area originally occupied by the Turks” and its Old Turkish name *kendir* - according to him deriving perhaps from an original form *kéntir* - considered as a probable Indo-European, maybe Tokharian, loan-word. In this connection one should indicate that several other lexemes functioning in the medieval Turkic language, he also found²⁰³ as possible (e.g. *arpa* 'barley') or probable (*bére* - a measure of length) loan-words from Tokharian.

24. M. M. M a y r h o f e r in the third volume (1976) of his etymological dictionary of the Old Indian language, in the entry concerning the Sanskrit term *śaṇāḥ* mentioned²⁰⁴ that it denoted *Cannabis sativa* L. ('a species of hemp') or *Crotalaria juncea* L. (i.e. sunn-hemp). Then, he indicated also some of its derivatives, i.e. Pali and Prakrit *saṇa*, Hindi *san*, and occurring in a Niya text²⁰⁵ *śaṇṇa* - all meaning 'hemp'. Further, as cognate terms he mentioned Khotan Saka *sāmṇā*, Zoroastrian Pahlavi and New Persian *san* also applied to that plant, and added tentatively the Ossetic word *san* 'wine'. Then, he pointed out several names beginning with velar consonants, i.e. Khotan Saka *kaṃha* 'hemp', Ossetic Iron *gæn*, Ossetic - Digor *gænæ* 'hemp, flax', Greek *kávvaßis*, and some others. He seemed likewise to include here their Dravidian counterparts indicated by him separately, i.e. Tamil *caṇal*, *caṇappu* and Kanarese *saṇabu*, also meaning 'hemp'. As regards the ultimate origin of that series of names, deriving in his conviction from a "wander-word", he concluded that it should be connected with the Uralic zone ("uralischen Bereich"), having in mind evidently the linguistic affiliation. In this connection he briefly referred also to O. Schrader's and some other scholars' views.

25. I. M. S t e b l i n - K a m e n s k y in his comparative study on the cultivated plants' appellations in the Pamir languages (1982), while reviewing the hemp names belonging to the series, he considered²⁰⁶ as formed

according to the "centum" rule, first indicated²⁰⁷ Wakhi *kəm* and Ishkashmi *kəm*, the terms which, in his opinion, must have been introduced to these languages "sufficiently early". He emphasized also that these appellatives have no close analogies among other languages of the Pamir group and in the Tajiko - Persian dialects. As the nearest phonetic and semantic counterparts to these terms he pointed out²⁰⁸ Khotanese (i.e. Khotan Saka) names *kaṃha*, *kāṃha* and Ossetic appellatives, i.e. Iron *gæn* and Digor *gænæ*. Besides, he recalled that H.W. Bailey for the Khotan Saka *kaṃha* 'hemp' and *kumbā* 'flax' suggested a common prototerm, he reconstructed in two variants, i.e. **kanbāka* - and **kanapa* -, applied to both these plants. Further, he listed²⁰⁹ other cognate appellatives, i.e. Buddhist Sogdian *kynp* and Khwarezmian *knb*-, Tajik and Persian *kanab*, *kanaf* among others. As to the Wakhi *kəṇəy* 'white cotton home-woven textile', he found it etymologically nearest to the Ossetic hemp names and was inclined to derive it directly from the form *kan(a)* 'hemp, flax', he admitted as an Old Iranian term. As regards, instead, Shughni *kanāb* 'hemp' and Sarikoli *kandir* 'hemp, flax', he considered them as loan-words from the Tajik and Uighur respectively.

Steblin-Kamensky juxtaposed also some names, he defined²¹⁰ as "etymologically identical" with the former ones but formed after the "satem" rule, i.e. Old Indian *śaṇā*, Khotan Saka *sāmṇā*, Persian *san* - all applied to hemp - and Ossetic *sæn* meaning 'wine'. In connection with them he mentioned likewise several terms applied in the area in question to some kinds of cloth, i.e. Wakhi, Ishkashmi, Sanglichi and Yazghulami *son*, Shughni *sūn*, Afghan *sahn*, *sān*, Khovar *sān* and Wershikwar *san*²¹¹ - all in his view indirectly deriving from the Indo-Aryan languages. For these latter he adduced also the Nepali and Hindi *san*, being the close phonetic counterparts of the former designations. As the ultimate source of all these terms he indicated the Ancient Indian *śaṇā* denoting hemp.

26. K. R é d e i in a study on the Indo-European - Uralic linguistic contacts (1986), after giving examples of hemp names in some Indo-European, Finno-Ugrian and Turkic languages, advanced²¹² his own hypothesis concerning their alleged provenance. Thus, indicating for comparison the term *kunibu*, which he considered as the Sumerian name of that plant, he suggested an ultimate Mesopotamian origin of the prototerm of the whole series of these appellations, that later on became possibly a "wander-word". In any case that word reached, according to him, the Iranian languages, and for their eastern branch he adduced first of all the tentative Middle Persian form **kana*, Sogdian *kynb*-, Khotan Saka *kaṃha*, *kāṃha* 'hemp', *kumbā* 'flax'

and Ossetic *gænæ*, *gæn* 'hemp, flax'. On the other hand, an Iranian language (though he did not indicate it) was in his view the source of the European hemp designations. Then, judging from the whole context, he assumed an analogical provenance for the hemp designations in the Finnic languages. However, if for the Mordvin terms he suggested their independent and direct derivation from another Iranian language, for the Cheremis names an indirect one through the basic language, ancestral also for other akin tongues.

One may add that Rédei also detailed and made precise²¹³ the data concerning hemp appellations in the languages of the Finnic-Permian group. Thus, for the Mordvin language he gave the following variants: *kańćt*, *kańt*, *kańč* in the Erza dialect and *kańf*, *kańff* in the Moksha dialect, while for the Cheremis language he indicated *kəńie* as a term in the Kosmodemyansk dialect and *kəńe* in the Urzum and Birk dialects. Besides, he adduced several variants of the terms applied to hemp-seeds in two Permian languages. So, for the Votyak language he mentioned *kenem* in the Sarapul and Kazań dialects, and for the Zyryan language dialects a few composite appellatives with the first component being either *ken* or *kə-n*, evidently denoting hemp. Moreover, for all that plant's appellations in the Permian languages he proposed **kan* as a reconstructed prototerm.

One should still emphasize that for the hemp names in the Turkic languages Rédei admitted²¹⁴ also the same ultimate provenance, albeit through a way he did not go into.

27. M. S c h w a r t z in his study jointly published (1989) with that of D. S. Flattery, both concerning the problem of the identification of *haoma/soma*, included also into his inquiries some hemp names from the area he considered. First, he indicated²¹⁵ the Ossetic *gæn(æ)* 'hemp' and **kæn-* 'flax', that latter to be detected in the word *kəttāg* 'linen'. Then, he expressed the supposition that the prototype of that appellative "was early disseminated" in the Caucasus, where in Svanetic it gave *kan* and in Abkhaz *a-k^ono*, but also independently among the Turkic and Uralic peoples, where such terms like *kendir* and *keńe* (that latter in the Cheremis) appeared respectively. He mentioned also the Sanskrit *śana* 'hemp', as the next appellative he was inclined to consider in that series, not excluding that its initial sound *ś* derived from a palatal *k*. Besides, regarding both the last names, he pointed out that they lack labial consonants which follow *n* in hemp appellations in the Assyrian, Middle Persian, Greek, Slavic and Germanic tongues on the one side, and the East Middle Iranian languages on the other. He adduced also some forms of the latter ones, thus, Khotanese (i.e. Khotan Saka) *kaṃhā* - 'hemp' (< ?

**kanfā* < **kanphā*) as well as Sogdian **kinbā* or **kenbā* (*kynp'*) and Khotanese *kumbā-* (< **kanbā*) 'flax', evidently based mainly on H. W. Bailey's inquiries.²¹⁶

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The second of the great series of appellatives here considered, embracing mainly some Iranian and Indian terms (set IV), also stimulated unfinished discussions, which led to great controversies concerning first of all its alleged prototerm. Besides, discrepancies in opinions pertained likewise to the semantic value of the particular names in the given period and ethnogeographical context. Some of these views are presented below.

1. V. H e h n in successive editions of his aforementioned compendium (i.e. from 1870 onwards) suggested²¹⁷ the affinity of the New Persian and Afghan terms for hemp, given by him in the form *beng* and *bang* (adding later²¹⁸ the Vedic *bhangā* 'hemp') as well as of the two Zendic (i.e. Avestan) words, namely *baṃgha* in its meaning "drunkenness" and *Baṃga*, the name of the *daeua* of Drunkenness, with the Russian *penka*, Polish *pienka* and Czech *pének*, *pénka*, 'hemp'. Then, having that in view, he assumed that these Slavic names, like many other words, could have been borrowed from the Scythians or Sarmatians.

2. O. S c h r a d e r in his lexikon (1901) emphasized²¹⁹ that acquaintance with hemp and its narcotic properties was very ancient among the Aryans, as indicated by a series of terms, thus Sanskrit *bhaṅgā* 'hemp' and 'intoxicating substance prepared from hemp's seeds', Avestan *baṃha-* 'a narcotic', New Persian *meng* and Afghan *bang* (but also Arabic *beng*, he added later²²⁰). Further, he found probable that Slavic designations of that plant, e.g. Polish *pienka* and Russian *penka* (he later gave²²¹ it in the form *penīka*), had been loan-words. Judging from the whole context of that remark, he considered them as borrowed from the Aryans.

3. B. L a u f e r in his work discussing the Chinese contribution to the ancient Iranian civilization (1919) indicating²²² Avestan *bangha* and Sanskrit *bhaṅga*, admitted that both these terms denoted hemp. Then, characterizing the degree of their mutual similarity (he did not hesitate to call them "identical"), simultaneously emphasized their dissimilarity to the European designations of that plant, that have in his view other affinities. As concerns, instead, Persian *bang*, denoting for him both henbane and narcotic prepared from the hemp-seeds, in spite those who traced it to the Avestan *bangha*

(*bañha*) as a general designations of narcotics, he preferred ²²³ to derive it directly from the Sanskrit *bhaṅgā*.

4. H. S. Nyberg in his book on the religions of ancient Iran (1938) stated ²²⁴ that the terms *bangha*, *baṅha*, occurring in the *Avesta*, denoted hemp, and thus the proper name *Pouru-bangha*, appearing in the *Fravaši-yašt* (13;124) ²²⁵, meant 'having much hemp', while the epithet of Ahura-mazda *ax^vafna abanḡha* from the *Vidēvdād* (= *Vendidad*) ²²⁶ (19;20) ²²⁷ - 'without trance and without hemp'. As regards the application of hemp Nyberg indicated some other references in *Vidēvdād*, from one (15;14) ²²⁸ of which it may be inferred that hemp was used as an abortive, from another (19;41) ²²⁹ that it served as a medium to attain ecstasy. Besides, he drew attention ²³⁰ to a description of a rite, to be found in a work coming from the time of the decline of the Sassanian dynasty, i.e. the *Ardā Vīrāz Nāmak*. According to the story here related one of the desturs, named Ardā Viraf (=Ardā Vīrāz) ²³¹, received from other priests the wine and 'Vištaspian hemp' (i.e. an extract of hemp) and after drinking it fell into an ecstatic sleep during which he visited Heaven and Hell.

Much later on Nyberg in his manual of Pahlavi (1974) to the Avestan *baṅha* / *bangha* - assigned ²³² a general meaning 'an abortive'. He remarked there, however, that, he maintains his former interpretation, seeing in this narcotic some sort of hemp, i.e. hashish. In his opinion the above mentioned term was rendered in Pahlavi by *mang*.

5. W. B. Henning in his study on Zoroaster (i.e. Zaratushtira) (1951) critically assessed ²³³ the attempts (that of H. S. Nyberg first of all) to consider the term *baṅha* appearing in the *Avesta* as corresponding to the *mang* in Pahlavi and *bang* in Persian, and denoting hemp. He indicated also that *baṅha* is repeatedly mentioned in the *Avesta* with dislike and even prohibited as a drug "producing miscarriage". He disapproved ²³⁴, therefore, the translation of the name *Pouru.bangha*, occurring in the *Fravaši-yašt* (= *Farvardīn Yašt*) (13;124) as meaning 'he who possesses much hemp' as well as of the Ahura-mazda epithet *ax^vafna abanḡha* from *Vidēvdād* (= *Vendidad*) (19;20) as 'without trance, without hemp'. Further, he even wrote ²³⁵ that to translate the latter, "as is usually done, as 'without sleep, without *baṅha*' - whether hemp or henbane - makes it appear a little incongruous". He emphasized, instead, that in better agreement with phonological rules would be its translation 'not subject to sleep, not liable to perish'. In connection with this he pointed out also that *baṅha* may correspond to Sanskrit *dhvamsa* (recte: *dhvaṃsa*), meaning just 'perishing'.

Besides, Henning attempted to prove ²³⁶ that two words in Persian transcribed *bang*, thus phonetically convergent, had a different origin and meaning. One of these terms, being indigenous, according to him always before the 12th century denoted henbane and in that meaning was also used later on. Another one, deriving from the Indian *bhaṅga*, after the Muslim conquest in India in the 11th century began, in his opinion, to be used as a designation of Indian hemp. As concerns the word *mang* Henning discussed two cases of its occurrence in Pahlavi literature. Thus, he indicated first ²³⁷ the *Bundahišn*, the work of the 9th century, where it is said ²³⁸ that Ahura-mazda gave a potion of so named drug to the Primordial Bull "to kill him painlessly". Then, he mentioned the book (he meant here *Ardā Vīrāz Nāmak*), he considered ²³⁹ to be "a late product of the post-Sassanian times", in which we read that the saint Ardā Virāf (i.e. correctly Ardā Vīrāz) received a beverage in which wine was mixed with *mang*. As regards that last substance he concluded (contrary to H. S. Nyberg) that "whatever it was", it did not denote hemp, but a deadly poison. Finally, he remarked ²⁴⁰ that this term was also applied more specifically to henbane, but simultaneously stated that "correct words" for hemp and henbane, both in Pahlavi and Classical Persian were *šāhdānak* / *šāhdāne*.

6. M. Eliade in his study on shamanism (1951), after stating ²⁴¹ that shamanistic ecstasy attained through the hemp-smoke was known in ancient Iran, indicated two expressions occurring in the *Avesta* in which, according to him, that plant called *bangha*, *baṅha* appears. One of them is the proper name *Pouru-bangha* from the *Fravaši-yašt* (13;124), he translated as "possesseur de beaucoup de chanvre", another an epithet of Ahura-mazda from the *Vidēvdād* (19;20), he rendered as "sans transe et sans chanvre" (he meant here *ax^vafna abanḡha*, though he did not quote it). Then, commenting on ²⁴² the story narrated in the *Ardā Vīrāz Nāmak* ²⁴³ in which it is said that Arda Viraf (i.e. Ardā Vīrāz) after drinking the wine and the "narcotique de Vichtaspe" fell into a sleep lasting seven days and seven nights, Eliade remarked that it resembled rather a shamanistic trance. Besides, judging from the whole context of his comment, he also identified that narcotic with hemp which, one should add, was named here *mang*. Eliade (continuing B. Munkácsi's hypothesis) stated ²⁴⁴ likewise that the Iranian term *bangha* 'hemp' has been adapted by some "Ugric" (he meant here Finno-Ugrian) languages, where it began to designate the typical shamanistic mushroom. Thus, undergoing some changes it gave, according to him, Vogul *pānkh* meaning 'mushroom' (*Agaricus muscarius*) ²⁴⁵ and in its northern dialect also

'drunkenness', while in Mordvin *panga*, *pango* and in Cheremis *pongo* - all meaning 'mushroom'. Finally, he concluded that the importance and techniques of shamanistic intoxication among these peoples was of Iranian origin.

7. G. W i d e n g r e n in his paper devoted to the studies of the Iranian religions (1955) assumed²⁴⁶ that intoxication with hemp in shamanistic rituals in ancient Iran had most probably great importance, which is attested to by the very wide spread of the term *bangha*, according to him just denoting that plant. Thus, he emphasized its repeated occurrence in the *Avesta*, inserted there for instance in the name *Pouru-bangha* (i.e. in *Fravaši-yašt*, 13;124), that in his view had to mean 'possessing many hems'. Furthermore, he assigned the meaning 'hemp' to the Middle Persian *bang/mang* as well. He indicated also the appearance of that last variant in a Pahlavi work (i.e. *Ardā Vīrāz Nāmak*) to which he alluded while reporting that its hero Ardāi Virāz (= Ardā Vīrāz), aiming to fall into a trance, drunk a beverage, designated as "Vishtaspian", composed of hemp (*mang*) and wine.

8. M. M. M a y r h o f e r in the second volume (1963) of his etymological dictionary, in the entry concerning the Sanskrit term for hemp juxtaposed²⁴⁷ its two variants, i.e. *bhaṅgā* (given in the form *bhaṅgāḥ*), attested in the *Atharva Veda* and *Suśruta Saṁhitā*, and *bhangā* from the *Śarṅgadharma Saṁhitā* (denoting also an intoxicating beverage prepared from that plant) with their closest counterparts, i.e. Pāli *bhaṅga* and Prakrit *bhaṅgā* as well as with Hindi *bhāṅg*. Then, considering that appellative as a possibly very old "culture-word", emphasized that it should be compared first of all with the Avestan *baṅha*, *bangha*, according to him applied to a plant (he did not specify) giving a narcotic and used for abortion, but also with the Pahlavi *bang/mang*, in his view denoting likewise a narcotic, while in the New Persian applied to henbane, and the first of them to Indian hemp as well. He stated, however, that the mutual relationship of these words has not been finally settled.

Independently on that problem Mayrhofer indicated²⁴⁸ another one, i.e. the question whether the aforementioned names of hemp had any connection through a metathesis with the widely spread appellatives to which belonged among others the Greek *κάνναβις*. Having that in view, with a great provision he suggested even tentatively the following relation between the alleged prototerm of both series of names: **bank/g-* : **kanp/b* (??). Besides, he signalled here also for comparison the Sanskrit term *śaṅāḥ* (!).

9. W. B e l a r d i in his comments (1979) to the first two chapters of the *Ardā Vīrāz Nāmak* (the title rendered by him as: *Artāi Vīrāz Nāmak*²⁴⁹) the word *mang*, appearing there repeatedly and denoting a beverage (designated also as "Vishtaspian") given to the priest Vīrāz, translated²⁵⁰ only as 'narcotic' without specification. He admitted also (contrary to W. B. Henning) that the original version and essential part of that work, excluding its later additions, was pre-Sassanian²⁵¹. Thus, he consistently stated that the custom mentioned in it "is certainly pre-Sasanian", and adducing several arguments, admitted (in opposition to W. B. Henning) the harmlessness of that drink²⁵². Instead, for the Avestan *baṅha/bangha*, with which according to Belardi²⁵³ (also contrary to W. B. Henning) the Middle Persian *bang/mang* 'henbane' (giusqiamo) is etymologically related, he also did not seem to exclude the same meaning. Besides, he even stated²⁵⁴: "We have to cross out 'hemp' from the vocabulary of old and middle western Iranian".

Then, looking for²⁵⁵ the etymology of the Old Iranian *bangā-*, Belardi considered as the prototerm of the Middle Persian *bang/mang*, though he rejected W. B. Henning's suggestion to relate it with the Sanskrit *dhvaṁsa* 'perishing, etc.', he found his proposition stimulating another solution. Considering namely that Iranian *b-* could arise from the Indo-Iranian *dhv-* and indicating that Middle Persian *bang* was "certainly a Solanacea", compared that term with the Sanskrit *dhvāṅksī*, a lexical form of the word entering as the first component into the name of two other plants, i.e. *Ardisia solanacea* and *Solanum indicum*²⁵⁶. Having all that in view, he concluded that "one can postulate an ancient Indian form **dhvaṅga-* which perfectly accounts for Iran. *bangā-*".

As regards the New Persian *bang*, identifying²⁵⁷ it with "Cannabis sativa subspecies indica", and designating it as "intoxicating drink made from its leaves", he inclined (like W. B. Henning) to connect it with the similarly sounding Indian appellatives, the oldest of those attested being *bhaṅgā* 'hemp' from the *Atharva Veda*. As regards the Sanskrit *bhaṅgā* 'hemp' he admitted²⁵⁸ its connection with *bhañj* 'to break, split, arrest, suspend, frustrate' as "quite thinkable at least at a level of popular etymology, for also the Soma is called *bhaṅgā* «breaking, bursting»".

10. I. M. S t e b l i n - K a m e n s k y in his study on the cultigens' appellations in the Pamir languages (1982) indicated first²⁵⁹ that the name *bang*, applied to the species *Cannabis sativa* L., occurs in the Wakhi, Ishkashmi, Shugni, Roshani, Yazghulami and Sarikoli languages, while applied to the Indian hemp, i.e. *Cannabis indica* Lam. in the Tajik, Uzbek,

Afghan and Persian languages, in two latter used likewise for henbane, i.e. *Hyoscyamus* L. He also mentioned other variants of that name, thus Kashmiri *bangā*, Khovar *bōn*, Werchikwar *boj*, Burushaski (i.e. from the Hunza region) *bāṇ* as well as Persian *mang*, that last denoting especially one variety of Indian hemp.

Steblin-Kamensky agreed²⁶⁰ also that the term in question is an ancient "culture-word", attested already in the *Avesta*, where in the form *baṇha* (*Vidēvdād* 15;14) it designates an abortive plant, while in the name *Pouru.bangha* (*Farvardin Yašt*, i.e. *Fravaši-yašt* 13;124) it denotes a cultivated hemp. He expressed²⁶¹ also his conviction that Avestan *baṇha* could be applied both to hemp- and henbane-narcotics.

Further, he pointed out²⁶² that in the Iranian languages *bang* as a name of narcotics has connotations with several other words, thus in Badakhshan-Tajik and in Wakhi (he used the term: Vakhanskiy) with *bangas(t)* 'crack' and in Persian with *mang* 'crazy', being only two examples of several other ones he adduced²⁶³.

Steblin-Kamensky concluded²⁶⁴ finally that M. M. Mayrhofer's juxtaposition on Indo-Iranian **bank/g-*: **kanp/b-* supports the inclusion of *bang* 'hemp' to the category of the ideophones. In connection with this he indicated²⁶⁵ also the analogical, in his conviction, relation between the Persian *šan* 'hemp's fibre' and Tajik *naša* 'anasha' (i.e. hemp- or henbane-narcotic).

11. D. S. Flattery and M. Schwartz have devoted two very detailed complementary studies, jointly published (1989)²⁶⁶, to the controversial problem of the botanical identifications of the plants, the extracts of which were used by the ancient Western Iranians and Indo-Aryans in their sacred rituals and respectively denoted by the terms *haoma* and *soma*. Furthermore, both these authors considered also other psychoactive substances of the vegetal origin applied by Western Iranians for diverse aims, and in this connection examined likewise the alleged meanings of the appellatives *bang* and *mang* occurring in Pahlavi and New Persian literature.

Thus, Flattery in discussing some references to *mang* in the Pahlavi texts, drew first attention²⁶⁷ to the *Ardā Vīrāz Nāmak* (transcribed by him: *Ardā Wīrāz Nāmag*), he supposed it to have been composed somewhat before the establishment of the Sassanian dynasty in the 3rd century A. D., but which an extant version is not older than the 9th century A.D. Quoting²⁶⁸ from it the passages (from chapters I and II) in which there is mention that *mang* was given to the priest Vīrāz (Wīrāz), Flattery assumed²⁶⁹ (in opposition to W. B. Henning) that the sense of that word was "primarily pharma-

ceutical, not botanical", and that it denoted rather an unspecified intoxicating, though not lethal, extract, being a "psychoactive drug". However, he gave also some arguments²⁷⁰ from which one may infer that he inclined to see in that drug *sauma* (= *haoma*), thus according to him the harmel (= wild rue), i.e. *Peganum harmala* L. (family: *Zygophyllaceae*). Besides, he emphasized²⁷¹ that in the above mentioned text it was also called "*mang* of Wishtasp". In connection with this he drew attention²⁷² to the *Dēnkard*, the work of the 9th century A. D. (though based, he wrote, on a "lost Avestan source") in which (Book VII, 4; 84) it is said that the ruler Kay Vishtāsp was given a beverage described as "*hōm* und *mang*"²⁷³. Then, considering that *hōm*, corresponded to Avestan *haoma*, that could designate also a nonintoxicating drink, he found motivation for the addition of the word *mang* as denoting a drug causing special effects, Vishtasp had to experience. Moreover, he remarked²⁷⁴ that from the fact that *bang* "being the Pahlavi gloss of *mang*" appeared also as a Persian term for henbane in the early Islamic pharmacognosy, one cannot infer that *mang* had necessarily the same meaning in the Zoroastrian literature.

Schwartz, starting his inquiries, juxtaposed²⁷⁵ two groups of phytonyms forming an Euroasiatic series of "phonologically similar words" denoting various, even mutually distant species, but all having narcotic properties. To the larger set of these appellatives he included among others: two words in the Indoeuropean languages, i.e. Greek *σπόγγος* and Latin *fungus* 'mushroom', a few words in the Uralic languages, e.g. Mordvin *paṅgo* 'mushroom, lichen', and Ostyak *paṅk*, Vogul *paṅx*, *poṅk*, designating the fly agaric (*Amanita muscaria* (L.: Fr.) Pers.) as well as one term in the Chukotkan languages, i.e. Chukchi, Koryak and Kamchadal *poṅ* 'mushroom'. To the second group of names in question, representing only the Indo-Iranian languages, he reckoned the Old Indian ("Indic") *bhaṅga* 'hemp' (and epithet of Soma), Avestan *baṇha* 'an abortive plant', Middle Persian *bang* 'henbane' and New Persian *bang* 'henbane, hemp'. Then, he very meticulously discussed²⁷⁶ the meaning and mutual relations of the bulk of these appellatives, and considered other authors' interpretation of some of them. Thus, according to him²⁷⁷, if we admit that "the source of Sanskrit *bhaṅga*- 'hemp' also referred to flax" and originally (as suggested by M. Mayrhofer) had the form **kambhā-*, **gambhā-*, or a similar one, "a metathesis to *bhaṅga*-", he wrote, "could have been motivated by the association of flax (and hemp) with the beating (Old Indic *bhaṅg-*) necessary for the plant fiber to be used". Further, he indicated²⁷⁸ too that *bhaṅgá-* 'smashing, breaking through' was used also (*R̥g Veda* 9,16;13) as an epithet of soma. As regards the Avestan *baṇha*-

(*Vidēvdād* 15;14), in his opinion ²⁷⁹, it was not a botanical term and, while meaning 'destructive, abortive', it might have concerned any plant liquidating a foetus.

Passing on to the Middle and New Persian *bang/mang*, usually translated as 'henbane', Schwartz advanced ²⁸⁰ some arguments in favour of greater antiquity of that last variant. He inclined ²⁸¹ also to derive it from a reconstructed form **mangā* 'psychotropic substance', that could have likewise a more restricted sense, i.e. 'henbane, datura ²⁸², harmel'. Besides, he found a possibility that its alleged Proto-Indo-European etymon was **meng* 'to create attractive illusion, to charm, etc.'. In connection with this he drew attention to the Old Indian *mañjū-*, *mañjulā-* 'attractive'; Greek *μαγγαβον* 'means of charming, bewitching, etc.'; Persian and Sogdian *mang*, Ossetic *mæng* and Middle Irish *meng-* all meaning 'deceit, trickery'. He assumed, therefore, that "Iranian inherited two homophonous words, **manga-* 'deceit, trickery' and **manga-* (or **manga*) 'magic potion, hallucinogen'".

Schwartz criticized ²⁸³, instead, for diverse reasons W. Belardi's attempt to reconstruct the form **dhvanga-* as the Proto-Indo-Iranian term for the *Solanaceae*, and to derive from it both the Iranian *baḡha* and *bang/mang* as alleged designation of henbane, and a few Indian appellatives, having *dhvāṅkṣa-* as the first component and denoting some medicinal plants ²⁸⁴.

As a final conclusion Schwartz stated ²⁸⁵ that "it is a coincidence that Ostyak *paṅk* 'intoxicating mushroom', Old Indic *bhaṅgā-*, Avestan *baḡha-*, characterisation of abortive plant ('destructive'), and Middle Persian *bang* 'henbane' are similar in form".

12. T. M a r s z e w s k i in his contribution concerning some useful plant's names in Southeast Asia, Oceania and Latin America (1995) drew ²⁸⁶ among others attention to the terms applied for hemp by some Hmong (branch of the Miao) tribes. Thus, for the northern Vietnam he gave examples of two such names, i.e. *màng*, attested for the region of Yen-bay on the middle course of the Song Chay river, and *ma*— for the region of Lai Chau, near the frontier with Laos. Then, for the adjacent south-western China he pointed out that the term *mā* has been also registered in the border land of Yunnan, Guizhou and Sichuan. Further, looking for comparative data among other Asiatic peoples, the closest counterparts for the first of these appellations he found in the Pahlavi *mang*, having the same meaning, as well as, basing on the decipherment by some iranologists, in the Bactrian word *mango* ²⁸⁷. Trying to explain that striking similitude, occurring between the hemp names of so geographically distant peoples, he recalled that most likely the Proto-

Miao once lived somewhere in Central Asia, as indicated by several traits of their culture. He found, therefore, very much probable that one group of them borrowed the term for that plant from a neighbouring eastern Indo-European people, possibly one of the northern groups of the Sakas or Tokharians. He stated ²⁸⁸ also that he does not see so far a reason to connect etymologically the term *mang*, used by a Hmong group from Vietnam, with very similar Southeast Asiatic appellations of some gramineous plants. Instead, having in view the fact that hemp's names current among some other groups of Hmong - both in northern Vietnam and in China - are "practically identical" with the Chinese term for that plant, he concluded ²⁸⁹ that "this is to be explained by a borrowing, but in which direction to be answered conclusively by sinologists". Furthermore, he emphasized that "the ancient seats of the ancestors of the Miao-Yao and Chinese as well as of the East Iranians and Tocharians" lay most probably within the area of wild hems' distribution, stretching "from the Lower Volga basin up to northern China and from western Siberia up to the Hindukush - Himalayan zone".

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Additionally still another, much shorter, series of appellatives, embracing a few Indian hemp names (Set II) and their Southeast Asiatic derivatives have been sometimes also briefly mentioned or discussed. Though phonetically their first morphemes resemble very much some names of the first series discussed above, not a single proposition by a linguist to relate these two sets of appellatives is so far known to the present author. Some references concerning the names in question are presented below.

1. A. de C a n d o l l e in his first phytogeographical comprehensive work (1855) pointed out ²⁹⁰ that as far as India is concerned hemp began to be cultivated there, particularly in northern provinces, in ancient times. He mentioned there also (following W. Roxburgh ²⁹¹) its Sanskrit names *baṅga* and *ganjika* (or in H. Piddington's transcription: *bhaṅga* and *gunjika*) as well as its later Bengali name *ganga*. Besides, also in these appellatives he indicated the occurrence of *an*, *ang*, which he considered to be the root common to all Asiatic and European hemp names.

2. G. A. G r i e r s o n in the paper discussing the references to hemp in Sanskrit and Hindi literature (1894), side by side with the three main Sanskrit names of that plant (i.e. *bhaṅga*, *Indrāśana*, *vijayā/jayā*) mentioned ²⁹² also another one: *gañjā*. He wrote, however, that he has not traced "in that

literature any difference between the uses of the word *gañjā* and of the word *bhaṅga*. Thus, he pointed out ²⁹³ for instance that in the *Bhāvaprakāśa*, a medical work written by Bhāvadēvamisra about the year A. D. 1600 *gañjā* appears there as one of the designations of *bhaṅga*, a medium used for digestion, infatuation and intoxication among others. Besides, he drew attention ²⁹⁴ to the folk-songs, in which both *gañjā* and *bhaṅga* are mentioned as an invariable beverage drunk by the heroes "before performing any great feat". Nevertheless, in another place of the same paper he remarked that "modern *kavirājas*" told him that each of these terms denotes another plant.

As the earliest known to him occurrence of the word *gañjā* he indicated ²⁹⁵ that which is to be found in the *Rājanighaṇṭu* ²⁹⁶ of Narahari Paṇḍita, dated at about A. D. 1300. But, it should be noted that not a single etymology of that word has been proposed by Grierson.

3. G. B u s c h a n in his work concerning the useful plants of the Old World in the light of prehistoric findings (1895) was inclined ²⁹⁷ to locate the homeland of hemp in northern and central Asia ("Der Hanf ist vielmehr ein Gewächs des centralen und nördlichen Asien"), and from that last area the plant spread, in his view, into Europe. Nevertheless, considering the accounts of travellers about the wild forms of hemp, he did not exclude that its early habitat embraced also the southern part of Russia ²⁹⁸. Besides, in spite the opinion of some scholars he did not accept ²⁹⁹ the alleged proofs of acquaintance with hemp in ancient Egypt and emphasized that nowhere in Hebrew texts (he meant here the ancient ones) is there any reference to it. Instead, following A. de Candolle, he drew attention to its very early occurrence in India and China, for that latter pointing out as well a reference to hemp in the *Shu Ching* ³⁰⁰.

As regards the names of hemp, he stated ³⁰¹ that Sanskrit terms *bangā* and *gangika* were both the source of its other Indo-German (i.e. Indo-European) as well as Semitic appellations, and (evidently following A. de Candolle) he gave some examples of them, i.e. Bengali *ganga*, Hindustani and Persian *bong*, Arabic *cannab*, Celtic *kanas*, and some others. Moreover, he advanced the supposition that all these appellatives could derive from a common prototerm (he even wrote: "gemeinsamen Wurzel"), being, perhaps, *kanna* or *ken* ³⁰².

4. M. M. M a y r h o f e r in the first volume (1956) of his etymological dictionary of the Old Indian language mentioned ³⁰³ the Sanskrit term *gañjā* 'hemp', its Prakrit version *gañja* and Gujarati form *gājo*. Then, he indicated as possibly cognate the Sanskrit morpheme/word *grñja-*, to which he attrib-

uted the function of designating "eine bestimmte Pflanze", and pointed out ³⁰⁴ its appearance in two forms of an appellative, i.e. *grñjanaḥ* 'a kind of garlic' and (following H. H. Wilson) ³⁰⁵ *grñjana-* meaning also 'the tops of hemp'. In his laconical comment Mayrhofer expressed, however, his conviction that this putative affinity is questionable ("Fraglich").

5. R. L. T u r n e r in his comparative dictionary of the Indo-Aryan languages (1966) in the entry ³⁰⁶ headed by the Sanskrit term *gañjā* 'hemp' gave it a still closer meaning adding "from which an intoxicating drink was made". He enlarged also the set of its derivatives in other Indian languages. So, side by side with the Prakrit form *gañja*, he mentioned also Punjabi *gāja* 'hemp for smoking', Marathi *gāja* 'dried hemp', Maithili *gājā*, Oriya *gañjā* 'hemp plant', and some other terms. Besides, he juxtaposed the above mentioned Sanskrit appellative with two other Sanskrit words, i.e. *grñja-* 'name of a plant' (one should add: entering into some plants' appellatives), appearing in the work *Suśruta - Saṁhitā* ³⁰⁷ as well as *grñjana-*, denoting either 'a kind of onion or garlic' ³⁰⁸ in the *Manava Dharmaśāstra* ³⁰⁹ or (after H. H. Wilson) 'tops of hemp chewed to produce inebriation' ³¹⁰.

Furthermore, pointing out ³¹¹ also (following R. Campbell Thompson) the word *gan.zi* as the Sumerian term, applied maybe to hemp, Turner suggested, it seems, its affinity with the Sanskrit *gañjā*.

6. M. A. M a r t i n in her paper concerning some aspects of hemp use in Southeast Asia (1975) juxtaposed ³¹² a few terms denoting that plant in some of the main languages of that area. As concerns the Thai *kancha*, *kanhcha*, Laotian *kan xa* and Cambodian (i.e. Khmer) *kānhcha* she considered them as the old widespread appellatives, deriving directly from the Sanskrit *ganja* (she wrote also *guñja*). For the Vietnamese, instead, she adduced two terms: the recent *cân-xa* ³¹³, for which she admitted the same affiliation, and the older one *gai ândo*.

As regards the time of hemp appearance in Southeast Asia, though Martin hesitated ³¹⁴ between two possibilities as to its introduction, i.e. either by the Arabs in the 13th - 14th centuries or by the Spaniards and Portuguese in the 16th century, she wrote also that for "the inhabitants, it would be the Indians who brought in that plant".

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In the next part (or parts) of this work first some other hypotheses concerning hemp names, the basic botanical data and the ethnohistorical background will be presented, and afterwards the main controversies concerning the subject of that study will be discussed.

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NOTES

¹ When the meanings or transcriptions admitted by particular authors for the names here juxtaposed differed to each other, they have been considered separately.

² H. W. Bailey, *Dictionary of Khotan Saka* (compiled by.....), Cambridge University Press, Cambridge 1979, pp. 51, 59, 62.

Remark: the Khotan Saka language is sometimes designated as Khotanese.

³ V. I. Abaev, *Istoriko-etimologicheskii slovar osetinskogo yazyka*, Tom I: A - K', Akademiya Nauk SSSR, Institut Yazykoznanii Moskva - Leningrad 1958, p. 513.

⁴ L. G. Gercenberg, *Khotano-sakskiy yazyk*, Izdatelstvo "Nauka", Moskva 1965, p. 35

⁵ W. B. Henning, *The Sogdian Texts of Paris*, "Bulletin of the School of Oriental and African Studies", University of London, 11/4 (1946), p. 724 (No. 1019).

Henning wrote here: "kynp", M. Benveniste tentatively 'hemp'; see also: p. 713.

⁶ Abaev, *op. cit.*, p. 513.

⁷ Henning, *op. cit.*, p. 724 (No. 1019); idem, *Khwarezmian language* [in:] Z. V. Togan'a Armağan, Istanbul 1956, p. 435; cf. Bailey, *op. cit.*, p. 62.

⁸ B. Ghari, *Sogdian Dictionary. Sogdian - Persian - English*, (Editor: S. Fotouchi, Farhang Publications), Tehran 1995, p. 203 a (No. 5103).

⁹ Abaev, *op. cit.*, p. 513.

¹⁰ Bailey, *op. cit.*, p. 52.

¹¹ I. M. Steblin-Kamensky, *Ocherki po istorii leksiki pamirskikh yazykov. Nazvaniya kul'turnykh rasteniy*, Akademiya Nauk SSSR. Ordena Trudovogo Krasnogo Znameni. Institut Vostokovedeniya, Moskva 1982, p. 64.

¹² *Ibidem*, p. 63.

¹³ I. I. Zarubin, *Shugnanskie teksty i slovar*, Akademiya Nauk SSSR, Institut Yazykoznanii, Moskva - Leningrad 1960, p. 161.

As indicated by I. M. Steblin-Kamensky (*op. cit.*, p. 64) Shugni *kanāb* is a recent loan-word from the Tajik language.

¹⁴ Tatjana Nikolaevna Pachalina, *Sarykolsko - russkiy slovar*, Akademiya Nauk SSSR, Institut Yazykoznanii, Moskva 1971, p. 260.

As indicated by I. M. Steblin-Kamensky (*op. cit.*, p. 64) Sarikoli *kandir* is a recent loan-word from the Uighur language.

¹⁵ August Jaba, *Dictionnaire Kurde - Français*, [Publié par ordre de l'Académie impériale des Sciences par M. Ferdinand Justi], St.-Petersbourg 1879.

One should add that besides the hemp name reported by A. Jaba (original transcription of that surname in Polish: Żaba) diverse variants of the appellatives, evidently borrowed from Turkish (or cognate language), are also attested, e.g. *kandir* (added by F. Justi - see: Jaba, *op. cit.*, p. 343 b) or *kundir* and *kenevir* (see: O. Farizov, *Russko - kurdskiy slovar*, Moskva 1957, p. 273 b) as well as with the additional term ~ *benk*, denoting especially the Indian hemp (*ibidem*).

¹⁶ Bailey, *op. cit.*, pp. 51, 62. Another transcription - see: Abaev, *op. cit.*, p. 512

¹⁷ R. L. Turner, *A Comparative Dictionary of the Indo-Aryan Languages*, Oxford University Press, London - New York - Toronto 1966, p. 211 (No. 3964).

¹⁸ William Roxburgh, *Flora Indica; or Descriptions of Indian Plants* [Reprinted literatim from Carey's Edition of 1832], Today & Tomorrow's

Printers & Publishers, New Delhi 5 - Faridabad [without date], p. 718.

Roxburgh added also the scientific term: *Cannabis sativa* Willd.

¹⁹ Turner, *op. cit.*, p. 211 (No. 3964). Turner added also: *Cannabis sativa*.

²⁰ Roxburgh, *op. cit.*, p. 718.

²¹ Turner, *op. cit.*, p. 211 (No. 3964).

²² *Ibidem*.

²³ Manfred Mayrhofer, *Kurzgefaßtes etymologisches Wörterbuch des Altindischen*, Band I: A-TH, Carl Winter - Universitätsverlag, Heidelberg 1956, p. 315.

²⁴ Turner, *op. cit.*, p. 211 (No. 3964).

²⁵ Manfred Mayrhofer *Kurzgefaßtes etymologisches Wörterbuch des Altindischen*, Band III: Y-H, Nachträge und Berichtigungen, Carl Winter - Universitätsverlag, Heidelberg 1976, p. 292.

²⁶ Steblin-Kamensky, *op. cit.*, p. 64.

²⁷ Bailey, *op. cit.*, p. 52.

²⁸ Mayrhofer, *op. cit.*, Band III, p. 292.

Adding before that appellative an abbreviation 'Niya-Dok.' Mayrhofer informs that this lexeme is attested in a text from Niya. Turner who is giving (*op. cit.*, p. 711, No. 12272) that lexeme in the same transcription, i.e. *ṣamṇa* explains (*op. cit.*, p. XIV) that the abbreviation 'Ni. Doc.', which is added before that term concerns the "Language of Kharoshti Inscriptions discovered by Sir Aurel Stein in Chinese Turkestan, edited by A. M. Boyer, E. J. Rapsan, and E. Separt". One should still remark that Niya, once within the limits of the ancient kingdom of Kroraina (see: Gercenberg, *op. cit.*, p. 10), lies in southern Kashgaria (i.e. within the present Sinkiang-Uighur province of China).

²⁹ D. N. MacKenzie, *A Concise Pahlavi Dictionary*, Oxford University Press, London - New York - Toronto 1990 [First edition 1970] pp. 79, 118.

Bailey (*op. cit.*, p. 52) mentioned that appellative as a "second form" (i.e. side by side with *k'nb*) occurring in Zoroastrian Pahlavi.

³⁰ Mayrhofer, *op. cit.*, Band III, p. 292; see also: Steblin-Kamensky, *op. cit.*, p. 64.

³¹ Turner, *op. cit.*, p. 711 (No. 12272).

³² Mayrhofer, *op. cit.*, Band III, p. 292.

Mayrhofer wrote here: "a species of hemp [*Cannabis sativa* oder *Crotalaria juncea*]".

See also: Sir Monier Monier-Williams, *Sanskrit - English*

Dictionary, New Edition greatly enlarged and improved with the collaboration of E. Leumann [&] C. Cappeller and other scholars, Munshiram Manoharlal Publishers Pvt Ltd., New Delhi 1994 [Originally published in 1899], p. 1048 b; Arthur Anthony Macdonell [&] Arthur Berriedale Keith, *Vedic Index of Names and Subjects*, Motilal Banarsidass, Delhi - Varanasi - Patna 1982 [First Edition 1912], Vol. II, p. 350 (*ṣaṇa* is indicated here as occurring in *Atharva Veda* II, 4,5 and in *Śatapatha Brāhmaṇa* III, 21, 11; VI 6, 1, 24; 2, 15).

³³ Sures Chandra Banerji, *Flora and Fauna in Sanskrit Literature*, Naya Prokash, Calcutta 1980, pp. 73, 77.

In both cases Banerji has given the botanical term, i.e. *Crotalaria juncea*. (again incorrectly, instead *Crotalaria*).

³⁴ Turner, *op. cit.*, p. 711 (No. 12276).

Turner wrote: 'Crotalaria of various species'.

³⁵ *Ibidem*, p. 711 (No. 12272).

³⁶ *Ibidem*, p. 711 (No. 12272 and No. 12274).

Turner wrote: 'the grain of Eleusine coracana'.

³⁷ Roxburgh, *op. cit.*, p. 545.

³⁸ H. S. Nyberg, *Die Religionen des Alten Iran*, "Mitteilungen der Vorderasiatisch-Aegyptischen Gesellschaft (E. V.)", 43 (1938) [The original in Swedish appeared in 1937], pp. 177-178; Mircea Eliade, *Le chamanisme et les techniques archaïques de l'extase*, Paris 1951, pp. 358-359; Wilhelm Eilers, *Einige altiranische Etymologie*, [in:] "Münchener Studien zur Sprachwissenschaft", Heft 45 [Festgabe für Karl Hoffmann], 1985, Teil II, p. 25; cf. Harold W. Bailey, *Plant Names*, [in:] *The Cambridge History of Iran*, Vol. II: *The Median and Achaemenian Periods*, Cambridge 1985, Appendix I, p. 872.

³⁹ Walter Belardi, *The Pahlavi Book of the Righteous Viraz, I, Chapters I-II*, Biblioteca di Ricerche Linguistiche e Filologiche 10, University Department of Linguistics and Italo-Iranian Cultural Centre, Roma 1979, p. 117.

⁴⁰ Steblin-Kamensky, *op. cit.*, pp. 61-62.

⁴¹ Paul Horn, *Grundriß der neupersische Etymologie*, Strassburg 1893, p. 53 (No. 232); see also: F. Justi, *Handbuch der Zendsprache*, Leipzig 1864, pp. 209, 346.

⁴² Christiane Bartholomae, *Altiranisches Wörterbuch*, Strassburg 1904, col. 925.

⁴³ David Stophlet Flattery and Martin Schwartz, *Haoma and Harmaline. The Botanical Identity of the Indo-Iranian Sacred Hallucinogen*

"Soma" and its Legacy in Religion, Language, and Middle Eastern Folklore, University of California Publications, Near Eastern Studies, Vol. 21, Berkeley - Los Angeles - London 1989, Part II, Martin Schwartz, p.121 (§ 197).

⁴⁴ André Maricq, *Inscription de Surkh-Kotal (Baghlān). La grande inscription de Kaniska et l'épigraphie, l'ancienne langue de la Bactriane*, "Journal Asiatique" 246/4 (1958), pp. 363, 364.

One should remark that the word in question appearing in that inscription is written in the form *μᾶγγο* (*op. cit.*, pp. 352, 363). Since according to Maricq γγ is to be spelled *ng* (*op. cit.*, p. 410), the whole appellative may be transcribed as *mango*.

⁴⁵ Barbara Mekarska, *An Attempt at the Reconstruction of the Bactrian Language System*, "Folia Orientalia", 15 (1974), p. 155.

⁴⁶ W. B. Henning, *Zoroaster. Politician or Witch-doctor?* [Ratanbai Katrak Lectures 1949], Oxford University Press, London 1951, pp. 32-34.

As concerns henbane Henning wrote (*op. cit.*, p. 33, footnote 4) what follows: "There are four kinds of *bang* = *Hyoscyamus*, the black, the red, the white, and the brown. Only the white variety (= *Hyoscyamus albus*) is used medicinally. All are highly poisonous, induce torpor, madness, disable, &c."

⁴⁷ Eilers, *op. cit.*, p. 25 (II 329); Geo Widengren, *Stand und Aufgaben der iranischen Religionsgeschichte*, "Numen. International Review for the History of Religions", 2 (1955), p. 66.

⁴⁸ Belardi, *op. cit.*, pp. 75, 85, 89, 91, 92, 116.

⁴⁹ Flattery - Schwartz, *op. cit.*, Part II, pp.127 (§ 217), 128 (§ 220 and footnote 7), 129 (§ 222).

⁵⁰ Henrik Samuel Nyberg, *A Manual of Pahlavi*, Part II: *Glossary*, Wiesbaden 1974, p. 125.

⁵¹ Manfred Mayrhofer, *Kurzgefaßtes etymologisches Wörterbuch des Altindischen*, Band II: *D-M*, Heidelberg 1963, p. 461.

Mayrhofer specified that the terms in question are in Zoroastrian Pahlavi.

⁵² Flattery - Schwartz, *op. cit.*, Part I, David Stophlet Flattery, p. 16.

⁵³ Horn, *op. cit.*, p. 53.

⁵⁴ Mayrhofer, *op. cit.*, Band II, p. 461.

In connection with these appellations W. B. Henning wrote (*op. cit.*, p. 33): "The Persian word *bang*, in so far as it means 'Indian hemp', is loanword from the Indian term *bhanga*. In Persian - unfortunately - the loanword collided with an indigenous word *bang* which also designated a plant, namely, 'henbane'".

⁵⁵ Eilers, *op. cit.*, p. 25 (II 329).

⁵⁶ Steblin-Kamensky, *op. cit.*, pp. 61, 62 (footnote 39).

⁵⁷ Flattery - Schwartz, *op. cit.*, Part II, p.127 (§ 217).

⁵⁸ Steblin-Kamensky, *op. cit.*, p. 61.

One should add that in the great dictionary of the Afghan language of M. G. Aslanov (*Afgansko-Russkiy Slovar' (puštu)* compiled under the editorship of N. A. Dvoryankov, Akademiya Nauk SSSR, Institut Narodov Azii, Institut Etnografii im. N. N. Miklukho-Maklaya, Izdatelstvo "Sovetskaya Enciklopediya", Moskva 1966, p. 541 a) *shāhdānā* is given as the term denoting hemp. Since *bang* is also attested as the Afghan hemp name, the geographical, social or still other range in which both these terms are used should be still verified (suggestion of Dr hab. Jadwiga Pstrusińska).

⁵⁹ Steblin-Kamensky, *op. cit.*, p. 61.

⁶⁰ Turner, *op. cit.*, p. 531 (No. 9354).

⁶¹ MacDonell-Keith, *op. cit.*, p. 93; see also: Banerji, *op. cit.*, p. 34.

⁶² Banerji, *op. cit.*, p. 34.

⁶³ MacDonell-Keith, *op. cit.*, p. 93.

⁶⁴ Turner, *op. cit.*, p. 531 (No. 9354).

⁶⁵ Mayrhofer, *op. cit.*, Band II, p. 461.

⁶⁶ Turner, *op. cit.*, p. 531 (No. 9354).

⁶⁷ *Ibidem.*, p. 531 (No. 9354).

⁶⁸ Harold N. Moldenke and Alma L. Moldenke, *Plants of the Bible*, Waltham, Mass., 1952 [Published by the Chronica Botanica Company], pp. 39-41, 51, 214, 215.

One should add here that within some recent change in botanical nomenclature the family *Gramineae* was renamed *Poaceae*, though the first of these terms still appears in some publications. Analogical situation is with the term *Papilionaceae* (see *supra*) which was replaced by *Fabaceae*. As regards the term *Andropogon aromaticus* Roxb. it concerns the species which in some publications (e.g. Ahmad Parsa, *Flore de l'Iran (La Perse)*, Volume V, Teheran 1950, pp. 945-946) is mentioned as *Cymbopogon martinii* (Roxb.) Wats.

⁶⁹ See: *infra*.

⁷⁰ In some dictionaries and other publications one can find also hemp appellations which cannot be included into the series here considered; they will be discussed in the next part of that work.

⁷¹ Several publications (e.g. some papers of H. W. Bailey, F. Crevatin, K.

Tallqvist and R. C. Thompson) have not been so far available to the present author.

⁷² Alph[onse] de Candolle, *Géographie botanique raisonnée*, Paris - Genève 1855, p. 833 (including the footnote a).

⁷³ Part of the *Talmud* written during the Roman occupation of Palestine. References to hemp appear there in *Kil'ajim* (V 8 b; IX 1 b, 7 b). See: *Die Mischna, I. Seder Zaraim. 4. Traktat. Kil'ajim, [Verbotene Mischgattungen]*, Text, Übersetzung und Erklärung. Nebst einem textkritischen Anhang von Dr. Karl Albrecht, Gießen 1914, pp. 49, 70, 71, 73.

⁷⁴ The name *konnab* is attested also by Georg Dragenhoff (*Die Heilpflanzen der verschiedenen Völker und Zeiten. Ihre Anwendung, wesentlichen Bestandtheile und Geschichte. Ein Handbuch für Ärzte, Apotheker, Botaniker und Droguisten*, Verlag von Ferdinand Enke, Stuttgart 1898, p. 179).

⁷⁵ In his work of 1883 (see: note 76) A. de Candolle reported (p. 118, footnote 5) also (following the same informant) the variants *hon-nab*, *hen-nab*.

⁷⁶ Alph[onse] de Candolle, *Origine des plantes cultivées*, Paris 1883, p. 177.

De Candolle's relevant reference lack, however, an exactitude, as he wrote: "...dans les plus anciens ouvrages chinois" and "...dans le *Shu-king* écrit 500 ans avant Jésus Christ". *Shu-Ching* was a compilation of ancient texts from diverse periods, that has been incorporated into the Confucian schools' tradition during the life-time of Kung-tsy (Confucius), i.e. between the end of the 6th and the beginning of the 5th century B. C. (see: Lai Ming, *A History of Chinese Literature*, London 1964, p. 36; Robert P. Kramer, *The development of the Confucian Schools*, [in:] *The Cambridge History of China*, Vol. I: *The Ch'in and Han Empires*, 221 B. C. - A. D. 220, edited by Denis Twitchett and Michael Loewe, Cambridge University Press, Cambridge 1986, Chapter 14, pp. 154, 705, 747, 748, 768).

⁷⁷ For the reference to hemp in *Shu Ching* see: Hui-lin Li, *An Archaeological and Historical Account of Cannabis in China*, "Economic Botany", 28/4 (October - December 1974), pp. 443-444.

⁷⁸ de Candolle, *Origine...*, p. 118.

⁷⁹ Victor Hehn, *Kulturpflanzen und Haustiere in ihrem Übergang aus Asien nach Griechenland und Italien sowie in das übrige Europa. Historisch-linguistische Skizzen*, Zweite umgearbeitete Auflage, Berlin 1874, pp. 166, 167. [The first edition of that work published in 1870 was not available to the present author].

⁸⁰ Hehn, *op.cit.*, Sechste Auflage neu herausgegeben von O. Schrader mit botanischen Beiträgen von A. Engler, Berlin 894, pp. 186, 187.

One should add that since that edition to the V. Hehn's text (concerning hemp among others) supplementary contributions by O. Schrader have been appended in large additional notes (signed by ** or inserted in brackets []) -see: *infra*.

⁸¹ Hehn, *op.cit.*, Zweite Auflage, pp. 167, 513 (note 48 to p.167); Sechste Auflage, pp. 187, 571 (note 54 to p. 187).

⁸² August Ahlqvist, *Die Kulturwörter der Westfinnischen Sprachen. Ein Beitrag zur der älteren Kulturgeschichte der Finnen* [Deutsche, umgearbeitete Ausgabe], Helsingfors 1875, pp. 43-44.

⁸³ An almost extinct dialect of the Baltic-Finnic group, spoken in the Ingermanland (a region on the border of Finland and Estonia) -see: Björn Collinder, *Fenno-Ugric Vocabulary. An Etymological Dictionary of the Uralic Languages*, Stockholm - Uppsala 1955, p. IX. In some publications (e. g. Péter Hajdú, *Linguistic Background of Genetic Relationships*, [in:] *Ancient Cultures of the Uralian Peoples* [edited by Péter Hajdú], Corvina Press, Budapest 1976, Part I - *Linguistics*, pp. 13, 41) this dialect is named Vodian.

⁸⁴ Several other variants of that appellative in diverse Vogul dialects, i.e. *ponäl*, *panlä*, *panël*, *panlę*, *polnã*; *pulnã*; etc., have been also registered -see: Bernat Mukácsy, *Wogulisches Wörterbuch*, geordnet, bearbeitet und herausgegeben von Béla Kálmán, Akadémiai Kiado, Budapest 1986, p. 453 a.

⁸⁵ The vernacular ethnonyms of these four peoples are: Udmurt, Komi, Mansi and Hanti (or Khanti) respectively -see among others: Collinder, *op. cit.*, p. IX.

⁸⁶ The dialect of the Baltic-Finnic group, spoken to the south-west of the Lake Onega - see: Collinder, *op. cit.*, p. IX.

⁸⁷ Friedrich Kluge, *Etymologisches Wörterbuch der deutschen Sprache*, I Lieferung, Strassburg 1882, p. 123.

⁸⁸ In later editions of his dictionary F. Kluge introduced gradually some slight corrections to his view. For instance in its fifth improved edition (Strassburg 1894) he juxtaposed (pp. 154-155) the Greek term with the alleged Old German form **hanapiz* and wrote that the shifting of a consonant proves that hemp's appellative already two centuries B. C. was assimilated by the Germans. Instead, in the seventh enlarged edition (Strassburg 1910) he even admitted (p. 193) that it took place many centuries B. C.

⁸⁹ O. Schrader, *Sprachvergleichung und Urgeschichte. Linguistisch -*

historische Beiträge zur Erforschung des indogermanischen Altertums, Jena 1883, p. 363.

⁹⁰ S c h r a d e r, *op. cit.*, Zweite vollständig umgearbeitete und beträchtlich vermehrte Auflage, Jena 1890, p. 426; see also: p. 425 (footnote *).

⁹¹ H e h n, *op. cit.*, Sechste Auflage, pp. 188, 189.

⁹² *Ibidem*, Anmerkungen, p. 533 (note 17 to p. 57).

⁹³ H e h n, *op. cit.*, Sechste Auflage, pp. 188, 189.

⁹⁴ See: *infra*.

⁹⁵ H e h n, *op. cit.*, Sechste Auflage, p. 188.

⁹⁶ Both these designations are put here in quotation-marks, as they have been erroneously and inconsistently applied by O. Schrader.

⁹⁷ See: *supra*.

⁹⁸ H e h n, *op. cit.*, Sechste Auflage, p. 188 (O.Schrader's contribution after: Thomas W r i g h t & Richard W ü l c k e r, *Anglo-Saxon and Old English vocabularies*, Second edition, London 1884, Vol.I, p. 198, footnote 13).

⁹⁹ O. S c h r a d e r, *Reallexikon der indogermanischen Altertumskunde. Grundzüge einer Kultur- und Volkergeschichte Europas*, Strassburg 1901, p. 331.

¹⁰⁰ *Ibidem*, p. 332.

¹⁰¹ *Ibidem*, pp. 331, 332.

¹⁰² *Ibidem*, p. 332.

¹⁰³ S c h r a d e r, *op. cit.*, Zweite vermehrte und umgearbeitete Auflage, herausgegeben von A. N e h r i n g, Erster Band, Berlin und Leipzig, 1917-1923, p. 440.

¹⁰⁴ *Ibidem*, p. 441.

¹⁰⁵ *Ibidem*, p. 441; see also: *op. cit.*, Zweiter Band, Berlin und Leipzig 1929, p. 265.

¹⁰⁶ Schrader did not give location of that reference. See: *Hesychii Alexandrini Lexicon*. Editionem minorem curavit Mauricius S c h m i d t. Editio altera - Indice glossarum ethnicarum aucta. [Sumptibus Hermanni Dufftii, Libraria Maukiana], Jenae 1867, col. 1336.

¹⁰⁷ See: *Scholia in Appollonium Rhodium Vetera* recensuit Carolus W e n d e l, Bibliothecae Graceae et Latinae Auctarium Weidmannianum Edendum curavit Otto R e g e n b o g e n, Volumen IV, Graefenhainichen 1935, p.197 (B. 946-54 c, 111-12 v.)

¹⁰⁸ Th. K e p p e n, *Dogadka o proiskhozdenii bol'shinstva indoevropeyskikh nazvaniy konopli*, "Zhurnal" Ministerstva Narodnago Proisvshcheniya" (S.-Petersburg'), 245 (May 1886), pp. 73-74.

¹⁰⁹ See: *supra*, note 73.

¹¹⁰ K e p p e n, *op. cit.*, pp. 74-75.

¹¹¹ That plant belongs to the family *Aclepiadaceae*. The name of that family was given by Keppen (*op.cit.*, p. 75, footnote1) in the form *Asclepiadeae*, applied formerly by some authors.

¹¹² K e p p e n, *op. cit.*, p. 76.

¹¹³ *Ibidem*, p. 79 (footnote 1).

See: August F i c k, *Vergleichendes Wörterbuch der indogermanischen Sprachen*, Dritte umgearbeitete Auflage, Erster Band, Göttingen 1874, pp. 545, 546.

¹¹⁴ K e p p e n, *op. cit.*, pp. 79-82.

¹¹⁵ *Ibidem*, pp. 84-85.

¹¹⁶ *Ibidem*, pp. 82-84, 85-86.

¹¹⁷ Vilh[elm] T h o m s e n, *Beröringer mellem de finske og de baltiske (litauisk-lettiske) Sprog. En sproghistorisk Undersøgelse*, "Mémoires de l'Académie Royale de Copenhague", 6^{me} Série, Classe des Lettres, Vol I, No 1, København 1890, pp. 177-178.

¹¹⁸ See: *supra*.

¹¹⁹ Wilhelm T o m a s c h e k, *Die alten Thraker. Eine ethnologische Untersuchung*, Unveränderter Nachdruck aus Sitzungsberichte der philosophisch-historische Klasse der Kaiserlichen Akademie der Wissenschaften, 130. Band, II. Abhandlung [1894], Wien 1980, p. 13.

¹²⁰ The term "Litu-Slaven" some scholars applied to the Baltic and Slavic peoples considered together.

¹²¹ H. H i r t, *Grammatisches und etymologisches*, "Beiträge zur Geschichte der deutschen Sprache und Literatur", XXIII. Band, 1898, pp. 334, 348.

¹²² *Ibidem*, p. 343.

¹²³ *Ibidem*, pp. 319-320.

See: R. M u c h, *Deutsche Stammsitze. Ein Beitrag zur ältesten Geschichte Deutschlands*, "Beiträge zur Geschichte der deutschen Sprache und Literatur", XVII. Band 1893, p. 63.

¹²⁴ H é r o d o t e, *Histoires*, Livre IV: *Melpoméne*. Texte établie et traduit par Ph.-E. L e g r a n d, Troisième édition, Paris 1960, p. 92 (IV, 74).

¹²⁵ H i r t, *op. cit.*, p. 320.

¹²⁶ Herman H i r t, *Die Indogermanen. Ihre Verbreitung, ihre Urheimat und ihre Kultur*, Zweiter Band, Strassburg 1907, Anmerkungen, p. 656 (Note: S. 280, 4. H a n f).

¹²⁷ H é r o d o t e, *Histoires*, Livre II: *Euterpe*. Texte établie et traduit par Ph. E. L e g r a n d, Paris 1948, p. 125 (II,92).

¹²⁸ A. Brückner, *Cywilizacja i język*, Warszawa 1901, p. 23.

¹²⁹ Idem, *Słownik etymologiczny języka polskiego*, Kraków 1926, p. 253.

¹³⁰ *Ibidem*, p. 252.

¹³¹ Johannes Hoops, *Waldbaume und Kulturpflanzen im germanischen Altertum*, Verlag von Karl J. Trübner, Strassburg 1905, pp. 472-473.

¹³² See: *infra*.

¹³³ See: *infra*.

¹³⁴ Hoops, *op. cit.*, p. 472.

¹³⁵ *Ibidem*, p. 473.

¹³⁶ Johannes Hoops, *Reallexikon der Germanischen Altertumskunde*, Zweiter Band: F-J, Strassburg 1913-1915, p. 446.

¹³⁷ Zoltán Gombocz, *Die Bulgarisch - Turkischen Lehnwörter in der Ungarische Sprache* [= "Memoires de la Société Finno-Ougrienne", XXX], Helsinki 1912, p. 92.

¹³⁸ *Ibidem*, pp. 92-93.

¹³⁹ Zoltán Gombocz, *Slavo-turcica* [in:] *Symbolae grammaticae in honorem Joannis Rozwadowski*, Volumen II [Apud Bibliopolas Gebethner & Wolff], Cracovie 1928, pp. 75-76; see also: pp. 530, 624.

¹⁴⁰ See: *supra*.

Gombocz quoted here the original edition of that scholar's work: A. Ahlqvist, *De vestfinska språkens Kulturord*, Helsingfors 1871.

¹⁴¹ Gombocz, *Slavo-turcica*..., p. 76. He adduced also the variant *kyńe* (*ibidem*, pp. 75, 530, 624).

¹⁴² See: *supra*.

¹⁴³ Sigurd Agrell, *Zwei Beiträge zur slavischen Lautgeschichte*, "Lunds Universitets Årsskrift", N. F. Adv. 1, Band 14, Nr 32, Lund - Leipzig 1918, pp. 25-26.

¹⁴⁴ Agrell meant here, of course, the similarity in the textile properties of both plants.

¹⁴⁵ Agrell, *op. cit.*, p. 25 (footnote 2).

¹⁴⁶ *Ibidem*, p. 26.

¹⁴⁷ Berthold Laufer, *Sino-Iranica. Chinese Contributions to the History of Civilization in Ancient Iran*, Field Museum of Natural History, Publication 201 [=Antropological Series, Vol. XV, No 3], Chicago 1919, p. 294.

¹⁴⁸ Jan Rozadowski, *Don-Tanaïs et Cimmériens*, "Rocznik Orientalistyczny", 2 (1919-1924), publ. 1925, pp. 142-144.

¹⁴⁹ *Ibidem*, p. 143.

¹⁵⁰ J. Löwenthal, *Wirtschaftsgeschichtliche Parerga*, "Wörter und Sachen. Zeitschrift für indogermanische Sprachwissenschaft, Volksforschung

und Kulturgeschichte", 9 (1926), p. 181.

¹⁵¹ One should remark here that Herodotos attested only that the Scythians, while enjoying a kind of bath in a odorous smoke obtained by throwing hemp seeds on heated stones, uttered the yells (see: Hérodote, *Histoires*, Livre IV..., p. 92).

¹⁵² V. Kiparsky, *Die gemeinslavischen Lehnwörter aus dem germanischen*, "Annales Academiae Scientiarum Fennicae", Ser. B, Tom XXXII, 2, 1934, p. 272.

¹⁵³ *Ibidem*, p. 273.

¹⁵⁴ Sara Benet, *Le chanvre dans les croyances et les coutumes populaires*, "Sprawozdania z posiedzeń Towarzystwa Naukowego Warszawskiego (Comptes Rendus de Séances de la Société des Sciences et des Lettres de Varsovie)", Wydział II nauk historycznych, społecznych i filozoficznych", Rok XXVII, 1934, Warszawa 1935, Zeszyt 1-6, pp. 77-82.

¹⁵⁵ It seems that S. Benet has wrongly given here an "Arabic-like" name of hemp as the Assyro-Babylonian.

¹⁵⁶ Benet, *op. cit.*, p. 79.

¹⁵⁷ *Ibidem*, p. 79.

Benet not quite correctly reported the relevant passage, as Theodor Benfey (*Griechisches Wurzellexicon*, Zweiter Band, Berlin 1842, pp. 101, 156) commented another variant of that Greek term, i.e. *kavvaßos*, and first compared *ßo* with *φā* (indicating the equivalence $\beta = \varphi$) and then with the Sanskrit suffix *bha*. As concerns the function attributed by Benfey to this suffix, one should indicate that M. Monier-Williams (*op. cit.*, p. 742 b) as one of the meanings of *bha* gave 'resemblance, likeness'.

¹⁵⁸ Benet, *op. cit.*, p. 80.

¹⁵⁹ Cf. Moldenke - Moldenke, *op. cit.*, pp. 40, 215.

¹⁶⁰ No exact location of both these variants of that hemp appellation has been indicated by Benet. As regards some references to be found in *Kil'ajim*, their location is given *supra* in the note 73.

¹⁶¹ Benet, *op. cit.* p. 80.

¹⁶² One should add that this artificial ethnonym, formed from the name of the ancient state Mitanni, concerns only its ruling class, having certainly an ethnolinguistic affinity, though not so close, with the Scythians, as it belonged most probably to the Indian branch of the Indo-Iranian stock.

¹⁶³ Sara Benetowa, *Konopie w wierzeniach i zwyczajach ludowych*. Prace Etnologiczne Instytutu Nauk Antropologicznych i Etnologicznych Towarzystwa Naukowego Warszawskiego, 2, Warszawa 1936, pp. 1-49.

¹⁶⁴ *Ibidem*, p. 39

¹⁶⁵ See: Diodorus of Sicily, *The Library of History*, with an English Translation by C. H. Oldfather, The Loeb Classical Library, London 1946, Vol. I, pp. 333, 335 (Book I, 97; 7); see also: pp. 332-333 (footnote 2).

¹⁶⁶ See: B. Meissner, *Hanf (C. Vorderasien)* [in:] *Reallexikon der Vorgeschichte*. Unter Mitwirkung zahlreicher Fachgelehrter herausgegeben von Max Ebert, Fünfter Band, Berlin 1926, p. 117.

¹⁶⁷ See: *supra* and *infra*.

¹⁶⁸ Benetowa, *Konopie...*, pp. 39-40; see also: *infra* note 180.

¹⁶⁹ *Ibidem*, p. 40.

¹⁷⁰ *Ibidem*, p. 44.

¹⁷¹ *Ibidem*, p. 41 (Basic text and footnotes 131 and 132).

¹⁷² *Ibidem*, p. 41-42.

¹⁷³ *Ibidem*, p. 43.

¹⁷⁴ See: *supra*.

¹⁷⁵ Benetowa, *Konopie...*, pp. 43-44.

¹⁷⁶ Sula Benet, *Early Diffusion and Folk uses of Hemp*, [in:] Vera Rubin [Editor], *Cannabis and Culture*, The Hague - Paris 1975, pp. 39-49.

One should notice that in the bibliography appended to that paper in the reference (*op. cit.*, p. 48) to her preliminary paper on that subject (see: note 154) an erroneous date 1936 (instead of 1935) and the name Sula (instead Sara) were given - the latter without explanation of that discrepancy.

¹⁷⁷ Benet, *Early Diffusion...*, p. 39.

Benet considered now also similar views expressed by some other scholars - see for instance: Moldenke - Moldenke, *op. cit.*, p. 131.

¹⁷⁸ Benet, *Early Diffusion...*, p. 40.

Benet indicated here also still another reference of B. Meissner (*Babylonien und Assyrien*, Heidelberg 1925, Zweiter Band, p. 84) concerning the use of hemp as an incense in ancient Mesopotamia.

¹⁷⁹ Benet, *Early Diffusion...*, pp. 40-41, 41 (footnote 2).

¹⁸⁰ See for instance: *Saint Joseph Edition of The New American Bible Translated from the Original Languages with critical Use of All the Ancient Sources by Members of the Catholic Biblical Association of America*. Sponsored by Bishop's Committee of the Confraternity of Christian Doctrine. With many helps for Bible Reading Catholic Book Publishing Co., New York 1970-1980.

The relevant terms are rendered here as 'sweet cane' (Isaiah 43, 24; Jeremiah 6, 20 - pp. 868, 901), 'fragrant cane' (Exodus 30, 22-23 - p. 89), 'aromatic cane' (Ezekiel 27, 19 - p. 997) or 'calamus' (Song of Songs 4, 14 - p.

746) - thus in any case plants characteristic for their fragrant scent (see: footnotes on pp. 746, 868).

¹⁸¹ Benet, *Early Diffusion...*, pp. 41, 49 (after Siegfried Klein, *Tod und Begräbnis in Palistina*, H. Itzkowski, Berlin 1908).

¹⁸² Benet, *Early Diffusion...*, p. 41.

¹⁸³ *Ibidem*, p. 40.

¹⁸⁴ *Ibidem*, p. 41.

¹⁸⁵ *Ibidem*, pp. 39, 42.

¹⁸⁶ Martti Räsnen, *Der Wolga-bolgarische Einfluss im Westen im Lichte der Wortgeschichte*, "Finnisch-Ugrische Forschungen", 29 (1946), p. 198 (footnote 1).

¹⁸⁷ Idem, *Neuere Forschungen über altaisch-slavische Berührungen*, "Zeitschrift für Slavische Philologie", 20/2 (1948), p. 448 (footnote 1).

One should here remark that the lexemes transcribed as *kunubu* or *qunnabu* were usually considered as Akkadian. That problem will be discussed in the next part of that work.

¹⁸⁸ Franciszek Sławski, *Pol. Krężel, kądziel, konopie*, [in:] *Inter Arma*. Zbiór prac ofiarowanych Prof. Kazimierzowi Nitschowi w siedemdziesiąt rocznicę urodzin (1 II 1944) przez Przyjaciół, Kolegów i Uczniów, Biblioteka Studium Słowiańskiego U. J., Seria, Nr 1, Kraków [1946], p. 89; see also: p. 87.

¹⁸⁹ *Ibidem*, p. 90.

¹⁹⁰ *Ibidem*, pp. 90-91; Hirt, *Die Indogermanen...*, p. 656 (see: *supra* note 126).

¹⁹¹ Sławski, *op. cit.*, p. 91.

¹⁹² *Ibidem*, pp. 91, 92.

¹⁹³ *Ibidem*, p. 91 (footnote 2).

¹⁹⁴ See: *supra*.

¹⁹⁵ Franciszek Sławski, *Słownik etymologiczny języka polskiego*, Tom II, Kraków 1958-1965, p. 425.

¹⁹⁶ See: *supra*.

¹⁹⁷ Abaev, *op. cit.*, pp. 512, 513, 590-591.

¹⁹⁸ *Ibidem*, p. 513; see also: p. 590.

¹⁹⁹ One should remark here that in the relevant publications of H. W. Bailey and L. G. Gercenberg (see: *supra*, note 2 and 4) these last terms have been mentioned as denoting flax.

²⁰⁰ Abaev, *op. cit.*, p. 513.

²⁰¹ V. I. Lytkin - E. S. Gulyaev, *Kratkiy etimologicheskii slovar' komi yazyka*, Izdatelstvo "Nauka", Moskva 1970, p. 141.

²⁰² Sir Gerard Clauson, *An etymological Dictionary of the Pre-Thirteenth-Century Turkish*, At the Clarendon Press, Oxford 1972, p. 729.

²⁰³ *Ibidem*, pp. 198, 355.

²⁰⁴ Mayrhofer, *op. cit.*, Band III, p. 292.

²⁰⁵ See: *supra* note 28.

²⁰⁶ Steblin-Kamenskij, *op. cit.*, p. 64.

²⁰⁷ *Ibidem*, pp. 63, 127.

²⁰⁸ *Ibidem*, pp. 63-64.

²⁰⁹ *Ibidem*, p. 64, see also p. 127.

²¹⁰ *Ibidem*, p. 64.

²¹¹ D. L. R. Lorimer (*Werchikwar English Vocabulary* (With a few Werchikwer Texts), Instituttet for Sammenlignende Kulturforskning, Series B., Skrifter LI, Norwegian Universities Press, Oslo 1962, p. 207 b) has reported that *san* in the Werchikwar designates 'a kind of cotton cloth'.

²¹² Károly Rédei, *Zu den indogermanisch-uralischen Sprachkontakten*, "Veröffentlichungen der Kommission für Linguistik und Kommunikationsforschung", Heft 16 (= Österreichische Akademie der Wissenschaften. Philosophisch-Historische Klasse, Sitzungsberichte, 468 Band), Wien 1986, p. 71.

²¹³ *Ibidem*, pp. 70, 71; see also: pp. 89, 90.

²¹⁴ *Ibidem*, p. 71.

²¹⁵ Flattery-Schwartz, *op. cit.*, p. 123 (§206).

²¹⁶ H. W. Bailey, (*op. cit.*, pp. 51, 52, 62) inclined to derive the Khotan Saka *kaṃḥa* 'hemp' from **kanfa* < **kana-b(h)a-*, while Khotan Saka *kumbā* and Sogdian *kanba* 'flax' from **kanaba*.

²¹⁷ Hehn, *op. cit.*, Zweite Auflage, p. 513 (note 48 to p. 167).

²¹⁸ Hehn, *op. cit.*, Sechste Auflage, pp. 571-572 (note 54 to p. 187).

²¹⁹ Schrader, *Reallexikon...*, Erste Auflage 1901, p. 332.

²²⁰ Schrader, *op. cit.*, Zweite Auflage, Erster Band, 1917-1923, p. 441.

²²¹ *Ibidem*, p. 441.

One should remark that Schrader did not give exact information as concerns the time and regions for which that appellative has been attested in both these languages.

²²² Laffer, *op. cit.*, pp. 293-294.

²²³ *Ibidem*, p. 582.

²²⁴ Nyberg, *Die Religionen ...*, pp. 177-178.

²²⁵ See: *The Zend-Avesta*, Part II: *The Sīrōzahs, Yasts and Nyāyis*, translated by James Darmesteter ("The Sacred Book of the East", vol. 23), Motilal Banarsidass, Delhi 1988, p. 179 (XIII, *Farvardīn Yast*, XXVII, 124).

²²⁶ Recent authors mostly use the proper title of that work, i.e. *Vidēvdād*.

²²⁷ See: *The Zend-Avesta*, Part I: *The Vendīdād*, translated by James Darmesteter ("The Sacred Book of the East", vol. 4), Motilal Banarsidass, Delhi 1988, p. 209 (*Fargard XIX*, 20 (67)).

In Darmesteter's translation the epithet of Ahuramazda is "never asleep, never intoxicated".

²²⁸ Nyberg, *Die Religionen...*, pp. 178, 341; see also: p. 340.

²²⁹ One may quote here the respective passages in the version of *Vidēvdād*, translated by J. Darmesteter (see: *The Zend-Avesta*, Part I: *The Vendīdād*, *op. cit.*) Thus, in the first of them (XV, 14 (43) - p. 175) we read: "...The old woman brings her some Banga, or Shaêta, or Gnâna, or Fraspâta³, or some other drugs that produce miscarriage...". In the comment to that reference J. Darmesteter wrote among others: "³ B a n g a is b a n g or m a n g, a narcotic made from hempseed; ...". In the second passage (XIX, 41(137) - p. 217) we have: "...that the holy Sraosha may smite down the fiend Kunda³, who is drunken without drinking". So, the use of hemp is not mentioned here, and therefore, in the present author's view, it may be, if at all, only guessed.

²³⁰ Nyberg, *Die Religionen...*, p. 290.

²³¹ Nyberg emphasized (*Ibidem*, p. 290) that Ardā Viraf was a traditional form of that name which correctly should be given in the form Ardā Virāz.

²³² Nyberg, *A Manual...*, p. 125.

²³³ Hennig, *Zoroaster...*, p. 31.

²³⁴ *Ibidem*, pp. 31-32.

²³⁵ *Ibidem*, p. 34.

²³⁶ *Ibidem*, pp. 33-34.

²³⁷ *Ibidem*, p. 32.

²³⁸ Cf.: *Pahlavi Texts*. Part I: *The Bundahis - Bahman Yast, and Shāyast Lā-shāyast*, translated by E. W. West ("Sacred Books of the East", vol. V), Motilal Banarsidass, Delhi 1987.

One should remark that in this version of *Bundahišn*, in the relevant Chapter IV (1-4 - pp. 20-21) no mention about Ahura Mazda giving a potion of *mang* to the Primeval Bull is to be found. Instead, in the Appendix to that book (*Selections of Zād-Sparam*. Brother of the dastūr of Pārs and Kirmān A. D. 881), being the paraphrase of the *Bundahišn* (I-XVII) we read (Part I, Chapter II, 6-7 - pp. 161-162) that Aūharmazd gave to the primeval ox a narcotic called *bang*. In his comment to that passage E. West wrote (p. 162, footnote 2): "This is a misunderstanding of the corresponding phrase in *Bund.* III, 18.

The narcotic here mentioned is usually prepared from the hemp..."

²³⁹ H e n n i n g, *Zoroaster*, p. 32.

²⁴⁰ *Ibidem*, p. 34.

In the dictionary of M. G. A s l a n o v (*op. cit.*; see: note 58) the name adduced by Henning is given (p. 541 a) in the form *shāhdānā*.

²⁴¹ E l i a d e, *op. cit.*, pp. 358-359.

²⁴² *Ibidem*, p. 359

²⁴³ One should notice that still other transcriptions of that title have been applied, thus by M. Eliade (*op. cit.*, p. 359, footnote 1) *Artā Vīraf-Nāmak*; by M. Molé (*Les implications historiques du prologue du Livre d'Artā Vīrāz*, "Revue de l'histoire des religions", (= Annales du Musée Guimet), 139 (1951), p. 39) *Artā Vīrāz nāmak*; by W. Belardi (*op. cit.*, *supra*, pp. 9, 10) *Artāi Vīrāz nāmak*; by D. S. Flattery and M. Schwartz (*op. cit. supra*, p. 174) *Ardā Vīrāz Nāmag*, etc.

²⁴⁴ E l i a d e, *op. cit.*, p. 36.

²⁴⁵ As indicated by David N. P e g l e r (*Agaric Flora of Sri Lanka*, Kew Bulletin Additional Series XII, Royal Botanic Gardens, Kew, London 1986, pp. 212, 213) *Agaricus muscarius* Linn.: Fr. has been renamed *Amanita muscaria* (Linn.:Fr.) Pers. (family: *Amanitaceae*). In corrected nomenclature: *Amanita muscaria* (L.) Pers. (personal communication of Dr Zofia Heinrich).

²⁴⁶ W i d e n g r e n, *op. cit.*, pp. 66, 67.

²⁴⁷ M a y r h o f e r, *op. cit.*, Band II, p. 461; see also: M o n i e r - W i l l i a m s, *op. cit.*, p. 744 c.

²⁴⁸ *Ibidem* p. 462.

²⁴⁹ B e l a r d i, *op. cit.*, pp. 9, 10.

²⁵⁰ *Ibidem*, pp. 89, 91; cf. pp. 113-114.

²⁵¹ *Ibidem*, pp. 121-122; cf. p. 123.

²⁵² *Ibidem*, pp. 113-114.

²⁵³ *Ibidem*, p. 117.

²⁵⁴ *Ibidem* p. 117.

²⁵⁵ *Ibidem*, p. 119.

²⁵⁶ The full botanical term, once admitted for the first of these plants was: *Ardisia solanacea* Roxb. (See: *Index Kewensis. Plantarum Phanerogamarum. Nomina et Synonyma omnium Generum et Specierum...*, Tomus I, Oxonii [Oxford] MDCCCXV [1895], p.117 a). As indicated by Schwartz (see: Flattery - Schwartz, *op. cit.*, p. 127) it has been wrongly included by Belardi to the family *Solanaceae*. After the obligatory classification it belongs to the family *Myrsinaceae* (see: J. C. Willis, *A Dictionary of the*

Flowering Plants & Ferns. Eight Edition revised by H. K. Airy S h a w [Reprinted Student's edition of 1985]. Cambridge University Press, Cambridge 1988, p. 89).

The full botanical designations of the second plant mentioned by Belardi is *Solanum indicum* L. (see: Ahmad P a r s a, *Flore de l'Iran (La Perse)*, Volume IV, Partie 1, Teheran 1949, p. 297).

²⁵⁷ B e l a r d i, *op.cit.*, pp. 116-118.

²⁵⁸ *Ibidem*, p. 116.

²⁵⁹ S t e b l i n - K a m e n s k y, *op. cit.*, pp. 61, 127, 161.

²⁶⁰ *Ibidem*, pp. 61, 62 (footnote 39).

²⁶¹ *Ibidem*, pp. 61-62. For the Old Iranian language he admitted (*ibidem*, p. 129), however, the form *banga*- 'hemp'.

²⁶² *Ibidem*, p. 62.

²⁶³ S t e b l i n - K a m e n s k y remarked also (*op. cit.*, p. 63) that hemp names in the area considered by him occur also in the argotic word plays, irregular phonetic deformations as well as in doubling and rhyming combinations of words.

²⁶⁴ S t e b l i n - K a m e n s k y, *op. cit.*, p. 63.

²⁶⁵ *Ibidem*, p. 63 (footnote 41).

²⁶⁶ See: *supra* note 43.

²⁶⁷ F l a t t e r y - S c h w a r t z, *op. cit.*, pp. 15-16 (§24-§26).

²⁶⁸ *Ibidem*, pp. 15-16 (§24).

²⁶⁹ *Ibidem*, pp. 16-17 (§26: basic text and note 4).

²⁷⁰ *Ibidem*, pp. 14-15 (§24), 17 (§ 26 and § 27); see also: pp. 3 (§1), 45-66 (§57-§101), 101 (§156) -102 (§157). Flattery used the word *sauma* without an asterisk when he referred to the original intoxicant plant. But he admitted also * *sauma* as "the form which must be reconstructed for the Proto-Indo-Iranian ancestral language", being thus the common prototerm for the Iranian *haoma* and Indian *soma*. He remarked also that it "merely denoted a 'pressed out (liquid or plant)', without reference to any more specific properties of the substance". (See: Flattery - Schwartz, *op. cit.*, p. 4 (§4).

²⁷¹ F l a t t e r y - S c h w a r t z, *op. cit.*, p. 16 (§24), 17 (§28).

²⁷² *Ibidem*, pp. 17-18 (§28: basic text and notes 5 and 6).

²⁷³ Flattery based his inferences on the edition of *Dēnkard* by Dhajishah Meherjibhai M a d a n, published under the title *The Complete text of the Pahlavi Dinkard* (2 vols, Bombay 1911); see: Flattery - Schwartz, *op. cit.*, References, p. 164.

One should notice, however, that in the version of *Dēnkard* published in "The Sacred Books of the East" Series (vol. XVII: *Pahlavi Texts*, Part V:

Marvels of Zoroastrianism, translated by W. E. West, *Dînkard*, Book VII, Chapter IV, 85 — p.71) we read: "Carry up to Vistâsp the Hôrn and Vars² (mûi)...". In a relevant footnote West explained that 'Vars' denoted a lock of hairs from the tail of a white bull.

²⁷⁴ Flattery - Schwartz, *op. cit.*, p. 17 (footnote 4.).

²⁷⁵ *Ibidem*, p. 121 (§197).

²⁷⁶ *Ibidem*, pp. 121-123 (§195-205).

²⁷⁷ *Ibidem*, p. 124 (§207).

²⁷⁸ *Ibidem*, p. 124 (§210).

²⁷⁹ *Ibidem*, pp. 125 (§213), 126 (§214, §216).

²⁸⁰ *Ibidem*, p. 128 (§220).

²⁸¹ *Ibidem*, p. 128 (§221).

²⁸² i.e. *Datura alba* Nees. (family *Solanaceae*).

²⁸³ Flattery - Schwartz, *op. cit.*, pp. 126 (§216), 127 (§217: basic text and footnote 5).

²⁸⁴ Monier-Williams, *op. cit.*, p. 522 c.

²⁸⁵ Flattery - Schwartz, *op. cit.*, pp. 128-129 (§ 222).

²⁸⁶ Tomasz Marszewski, *Some vernacular names of useful plants in South-East Asia, Oceania and Latin America as possible indicators of ancient interethnic relations* (Part I), Polska Akademia Nauk. Oddział w Krakowie. Sprawozdania z Posiedzeń Komisji Naukowych, Tom XXXVIII/2, Lipiec - grudzień 1994, Kraków 1995, p. 39.

²⁸⁷ See: *supra* note 44.

²⁸⁸ Marszewski, *op. cit.*, p. 40.

²⁸⁹ *Ibidem*, p. 39.

²⁹⁰ de Candolle, *Géographie botanique...*, p. 833.

²⁹¹ Roxburgh, *op. cit.*, p. 545.

²⁹² Sir George Grierson, *The Hemp Plant in Sanskrit and Hindi Literature*, "The Indian Antiquary", 23 (September 1894), p. 260.

²⁹³ *Ibidem*, p. 261.

²⁹⁴ *Ibidem*, p. 263.

²⁹⁵ *Ibidem*, p. 261.

²⁹⁶ As reported by M. Monier-Williams (*op. cit.*, p. 873 b) *Rājanighaṇṭu* was a dictionary of materia medica (including many plants) written by Harahari-panḍita. As regards the name of that author, Sures Chandra Banerji (like G. Grierson) gave it (see: *A Companion to Sanskrit Literature*, Motilal Banarsidass, Second Edition, Delhi 1989, p. 690) in the version: Narahari. His aforesaid work, instead, was composed in the Banerji's view between A. D. 1235 and 1250.

²⁹⁷ George Buschan, *Vorgeschichtliche Botanik der Cultur- und Nutzpflanzen der alten Welt auf Grund prähistorischer Funde*, Berlin 1895, pp. 115, 116.

²⁹⁸ *Ibidem*, p. 117.

²⁹⁹ *Ibidem*, p. 115.

³⁰⁰ As regards the time in which that work was likely composed, Buschan wrote only (*op. cit.*, p. 115): "...aus dem 5. Jahrhundert stammenden Shuking...". Furthermore, he committed here, possibly following A. de Candolle, a similar inexactitude (see: *supra* note 76).

³⁰¹ Buschan, *op. cit.*, pp. 115-116.

It seems, that some of the names adduced by Buschan should be verified as regards their transcriptions.

³⁰² Buschan, *op. cit.*, p. 116.

³⁰³ Mayrhofer, *op. cit.*, Band I, p. 315.

³⁰⁴ *Ibidem*, pp. 315, 342.

³⁰⁵ See: *infra* note 310.

³⁰⁶ Turner, *op. cit.*, p. 211 (No. 3964).

³⁰⁷ Monier-Williams (*op. cit.*, p. 361 b) transcribed it *grīṇja* and indicated that references to it occur in the medical works of Suśruta (VI) and Caraka (VI, 21), i.e. *Suśruta Samhitā* and *Caraka Samhitā* respectively. As regards the first of these works one may quote here the following remark of S. Ch. Banerji (*op. cit.*, p. VII): "Originated in the last centuries before the Christian era, and appeared during the first centuries A.D. in a well defined form. Present form fixed by the 7th cent. A. D. according to some". The same author in the later publication (*A Companion to Sanskrit...*, p. 690) wrote: "The main medical treatises in Sanskrit are the *Caraka-samhitā* (1st century A. D.), *Suśruta-samhitā* (perhaps contemporaneous with Caraka)...".

³⁰⁸ Monier-Williams (*op. cit.*, p. 361 b) transcribed it as *grīṇjana* and, adding that it denoted also a small red variety of this plant "prohibited as food", indicated that relevant references are to be found among others in the *Manu's Law-book* (V. 5) and in *Yājñavalkya* (I, 176), i.e. in *Manu-smṛti* (= *Manawa Dharmasāstra*) and *Yājñavalkya-smṛti*. One may add that according to S. Ch. Banerji (*op. cit.*, p. VII) *Manu-smṛti* was compiled "between 200 B. C. and 200 A. D.". About *Yājñavalkya-smṛti*, instead, he wrote that its present form is "supposed to have been composed during the first two centuries of the Christian era".

³⁰⁹ See: *The Laws of Manu*, translated with extracts from seven commentaries by G. Bühler, "The Sacred Books of the East", Vol. XXV, Delhi 1988, Chapter V, 5 — p. 170: "Garlic, leeks and onions, mushrooms and (all

plants) springing from impure (substances), are unfit to be eaten by twice-born men".

³¹⁰ Besides that meaning Monier-Williams (*op. cit.*, p. 361 b) added (also after H. H. Wilson — see: Monier-Williams, *op. cit.*, p. XXX) the meaning 'turnip'. Then, following some Indian lexicographers (see: *op. cit.*, p. XXXIII) he admitted that *grīñjana* denoted likewise the "meat of an animal destroyed by a poisoned arrow".

³¹¹ Turner, *op. cit.*, p. 211 (No. 3964).

³¹² Marie Alexandrine Martin, *Ethnobotanical Aspects of Cannabis in Southeast Asia*, [in:] Vera Rubin [Editor], *Cannabis and Culture*, The Hague - Paris 1975, pp. 64, 65; see also: pp. 66, 69, 74.

³¹³ In the dictionary of Đào Duy-anh (*Pháp-Việt Từ-Điển - Dictionnaire Français - Vietnamien*, Trùng-thị Xuất-ban, Saigon 1957, p. 245) in the entry for hemp (*Chanvre*) two following names are given: *cây gai* and *cây gai dầu*.

³¹⁴ Martin, *op. cit.*, p. 64.

EWA SIEMIENIEC-GOŁAŚ

CHUVASH WORDS IN PALLAS'S DICTIONARY (1787—89)

In 1787-1789 in St. Petersburg was published a two-volume dictionary entitled: "Linguarum totius orbis vocabularia comparativa". Peter Simon Pallas, a member of the Petersburg Academy of Science was the author of this work. The Dictionary was compiled thanks to the initiative of the Russian empress Catherine the Great, who was famous for her linguistic interest¹.

The first volume of the Dictionary appeared in 1787 (although the Latin title indicates the date 1786 as the year of edition). The Russian title: "Sravnitel'nyje slovari vsech jazykov i narečij..." gives the correct date². The second volume was published in 1789.

The Dictionary comprises 273 entries, whose order is not alphabetical but topical. All entries presented in the Dictionary are numbered. Thus, in the I volume there are entries from 1 to 130 and the II volume contains words from 131 to 273. All entries are translated into 200 languages (51 Europeans languages and 149 Asiatic ones). Besides, in the II volume there are the names of numbers translated into 222 languages (pp. 471-491).

In Pallas's dictionary, among other languages, one can also find Chuvash lexical material. In this passage it should be emphasized that Pallas's Dictionary is of great value as a source of information about Chuvash vocabulary since in the XVIIIth century knowledge about the Chuvash language was very inconsiderable. For a period of many centuries Chuvash literature remained oral and only in 1767 when Catherine the Great visited Kazan a panegyric written in Chuvash was read to her. That panegyric is considered to be the first evidence of Chuvash written poetry³. Therefore, it seems that the Dictionary by Pallas had to be one of the first sources showing the Chuvash language to the world.

Below, I present all the Chuvash lexical material collected