

Introducing the Amaragannada scripts

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1 Introduction

This document provides brief description on group of scripts collectively known as Amaragannada (ಅಮರಗನ್ನಡ *Amaragannada*). They were developed in 15th century CE to write the religious literature of Kodekal Basavanna. These are constructed scripts based on Brahmi model. The objective is to bring them to the attention of the Unicode Technical Committee and to seek advice regarding the encoding of these scripts. An encoding of these scripts will help in documenting and digitizing the manuscripts of Amaragannada. Additional research is required to identify complete character repertoire and details of orthography. A formal proposal is forthcoming.

2 Background

Kodekal is a village located in the Yadgir district of Karnataka. These scripts were invented to preserve religious texts from destruction during Islamic rule¹. Kodekal Basavanna was born in 15th century CE and belonged to Ārūḍha tradition. These scripts were known only to Kodekal Basavanna and their followers. Hence it was known as secret script or *Gupta/Rahasya lipi*. According to their tradition Kodekal is also called as Amarakalyāṇa and script is called as Amaragannada where *Amara* refers to immortal in Kannada language.

Details regarding the origin of scripts are not known. Some of the alphabets were developed to disguise the shapes of Persian alphabet (see Type 2) to conceal the identity of Kodekal literature and protect the texts from destruction by Islamic rulers.

It is believed that a person named Ārūḍha Saṅgamēśvara gave Ēkādaśī lipipatra containing the alphabet of eleven scripts to Kodekal Basavanna. The work *Gurubodhe* of Kodekal Literature mentions the existence of eleven Amaragannada scripts as given below:

ಹನ್ನೊಂದಮರಗನ್ನಡ ಲಿಪಿ
ಉನ್ನತುತ್ತರ ಉಭಯಕಾಲದಿ
ನಮ್ಮನರಿತವರಿಲ್ಲವಯ್ಯ ಬಸವ ಕೇಳಿಂದ

Hannondamaragannaḍa lipi
unnatuttara ubhayakāladi
nammanaritavarillavayya basava kēḷenda

All these scripts adhere to common structure and orthography and differ in character shapes.

¹ Chapter 11 of reference 2.

3 Language and Literature

Kannada is the major language used and manuscripts are available in these scripts. The literature of Kodekal Basavanna available in these scripts includes Kārajñāna, Khaṇḍajñāna, Nītijñāna and Bōdhajñāna. Apart from the works Kodekal Basavanna we find literature of his followers & descendants and vachanas of 12th century Sharanas.

4 Geography

Amaragannada scripts were primarily used in the Northern Karnataka.

5 Current Situation

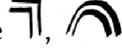
The scripts are not actively used presently. Several manuscripts in these writing systems are available. In recent years some workshops were conducted on Amaragannada by National mission for manuscripts at Department of Manuscriptology, Kannada University, Hampi.²

6 Script Details

6.1 Structure of the writing system

Amaragannada scripts are abugida which are written from left to right. They have no genetic relationship to other writing systems, but are invented scripts based upon the Brahmi model. Consonant letters possess the inherent vowel a. Consonant clusters are represented as conjuncts. Vowel signs are used to represent consonant vowels.

6.2 Structure of the characters

In general an Amaragannada letter consists of a frame and a nucleus that represents a distinctive phoneme. Some scripts do contain any frame or nucleus. The frames like , are commonly used. For example in one script GA is written as  consisting of  as the nucleus and  as frame. In Amaragannada the letter is encoded as single unit not as a combination of the frame and the nucleus. Some scripts only differ in frames like  in place of  having same nucleus. They may be considered as variants.

² <http://www.namami.gov.in/basic>

6.3 Vowels A is the only vowel used. Rest are represented by the letters that closer to pronunciation of respective vowels. The vowels I, II, U, UU, E, O are written as yi, yī, vu, vū, ye, vo and so on. AI and AU are also written as ay and av respectively. Vocalic R is written as ru.

6.4 Vowel signs

Dependent vowel signs are used. The shapes are derived from either Kannada or Devanagari vowel signs. All scripts share same set of Vowel signs. The following vowel signs are used:

AA	◌	E	◌॑ / ◌॒
I	◌॑	EE	◌॑॑
II	◌॑॑	O	◌॑
U	◌॑	OO	◌॑॑
UU	◌॑	AU	◌॑
VOCALIC R	◌॑		

A distinct character for vowel sign AI inspired from Kannada script may also exist.

6.5 Virama

The existence of Virama for suppressing the inherent vowel is not known. A new virama character may be introduced as a control character used for producing consonant clusters.

6.6 Consonant clusters

In Amaragannada the consonant clusters are written similar to Kannada known as *Ottakshara*. Consonant clusters are most commonly represented by a subscripted, and often transformed, consonant glyph for the second element of the cluster. The *repha/arkavottu* ೀ and Post-Base *ra-vottu* ು are borrowed from Kannada script.

6.7 Signs

Signs for ANUSVARA ು and VISARGA ೂ are attested.

6.8 Digits

Distinct digits are not attested in Amaragannada. Kannada digits (U+0CE6-U+0CEF) are commonly used.

6.9 Punctuation

In addition to | U+0964 DEVANAGARI DANDA and || U+0965 DEVANAGARI DOUBLE DANDA, Distinct ८ Danda and ८८ Double Danda are also attested. These signs are also sometimes found in Kannada inscriptions. Additional examination is required whether to propose in Amaragannada or Kannada or other common block.

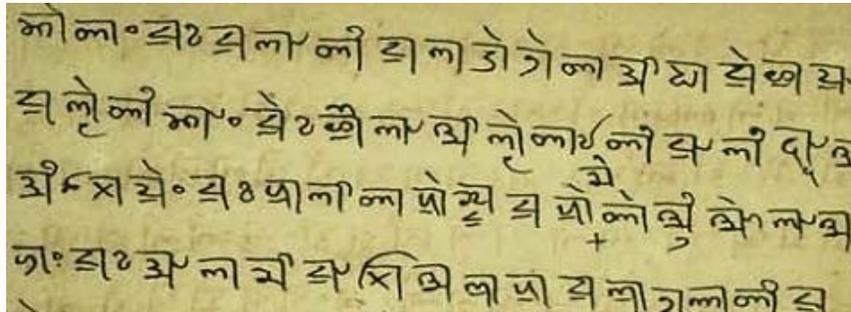
7 Other Details

7.1 Allocation

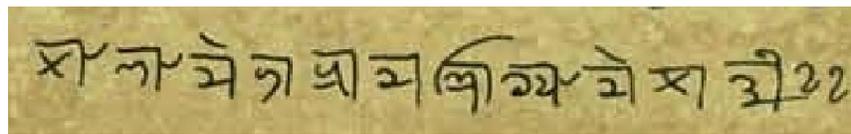
So far we have identified ten distinct scripts. Details on the eleventh script are not known presently. Each distinctly identified script should be separately encoded. The names Amaragannada A, Amaragannada B etc. may be used to recognize the scripts. As of now it is requested to tentatively allocate four columns each for at least ten scripts in the Roadmap to the SMP.

7.2 Sample representations of different scripts

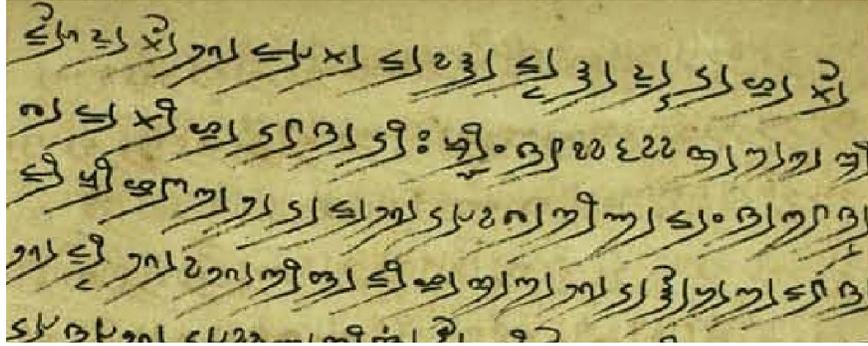
Type 1:



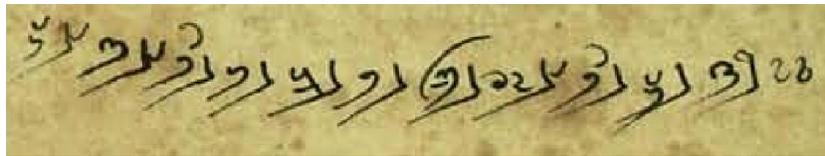
The folio given below transliterates as guruve basavaprabhuve gati.



Type 2:

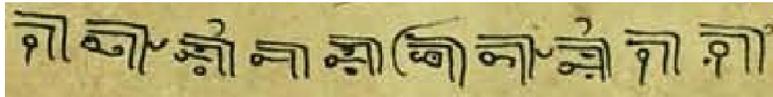


The folio given below transliterates as guruve basavaprabhuve gati.

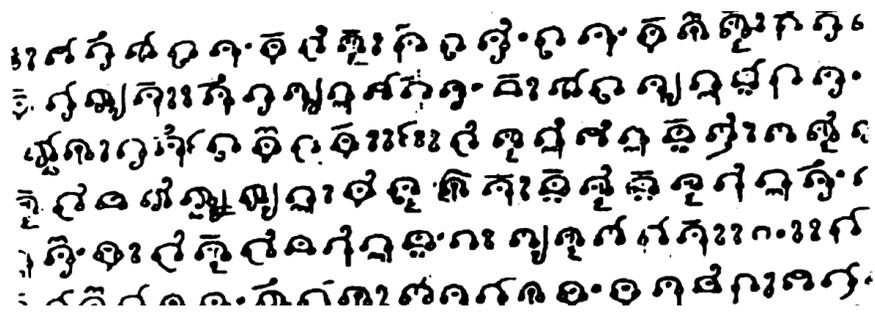


Type 3:

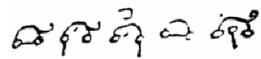
The folio reads as guruve bavaprabhuve gati.



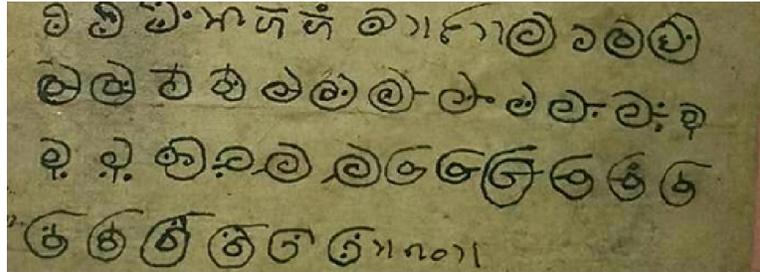
Type 4:



This excerpt given below reads as guruve gati



Type 9:



Type 10: The below folio appears to be another distinct script.

ଲାଲ ଶାଳ ଖୁଞ୍ଚି ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ
 ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ ଶୁଭ

8 References

1. Devarakondareddy. ಲಿಪಿಯ ಹುಟ್ಟು ಮತ್ತು ಬೆಳೆವಣಿಗೆ (=Lipiya huṭṭu mattu beḷavaṇige). Kannada Pustaka Pradhikara, Bengaluru. 2002.³
2. Soppimatha, B.A. ಕೊಡೇಕಲ್ಲ ಬಸವಣ್ಣ: ಒಂದು ಅಧ್ಯಯನ (=Koḍēkalla basavaṇṇa: ondu adhyayana). Karnatak University, Dharwad. 1988⁴

³ <http://kanaja.in/ebook/index.php/e-book/2017-10-25-10-07-25>

⁴ <http://shodhganga.inflibnet.ac.in/handle/10603/99971>

Handwritten text in a script, likely a form of Arabic or Persian, written on a page with a double-line border. The text is arranged in approximately 10 horizontal lines. The script is highly stylized and cursive. A small number '۴' is visible on the right side of the page.

Handwritten text in a script, likely a form of Arabic or Persian, written on a page with a double-line border. The text is arranged in approximately 10 horizontal lines. The script is highly stylized and cursive. A small number '۴' is visible on the right side of the page.

Figure 2. The folios from the same manuscript in another script.

ಅಮರಗನ್ನಡದ ಕೈಗಳು

	ಗನೆಯ ಕೈಯು	ಫನೆಯ ಕೈಯು								
ಅ	ಅ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಆ	ಆ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಇ	ಇ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಊ	ಊ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಋ	ಋ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ೠ	ೠ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಎ	ಎ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಐ	ಐ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಓ	ಓ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಔ	ಔ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಕ	ಕ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಖ	ಖ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಗ	ಗ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಘ	ಘ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಙ	ಙ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಚ	ಚ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಛ	ಛ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಜ	ಜ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಝ	ಝ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಞ	ಞ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಟ	ಟ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಠ	ಠ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಡ	ಡ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಢ	ಢ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ತ	ತ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಥ	ಥ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ದ	ದ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಧ	ಧ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ನ	ನ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಪ	ಪ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಬ	ಬ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಭ	ಭ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಮ	ಮ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಯ	ಯ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ರ	ರ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಲ	ಲ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ವ	ವ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಶ	ಶ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಷ	ಷ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಸ	ಸ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಹ	ಹ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ
ಳ	ಳ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ	ಫ

ವಿ.ಕೆ.ಎಂ.ರಾಜ್

Figure 5. A chart showing alphabet of Amaragannada scripts along with their equivalent in Kannada script (from Devarakondareddy, 2002).

	೧	೨	೩	೪	೫	೬	೭	೮	೯	೧೦
ಅ	ಅ	ಆ	ಇ	ಊ	ಋ	ೠ	ಌ	಍	ಏ	ಐ
ಆ	ಆ	ಊ	ಋ	ೠ	ಌ	಍	ಏ	ಐ	ಏ	ಐ
ಇ	ಇ	ಏ	ಏ	ಏ	ಏ	ಏ	-	-	ಏ	ಏ
ಊ	ಊ	ಋ	ೠ	ಌ	಍	ಏ	ಐ	ಏ	ಐ	ಐ
ಋ	ಋ	ಌ	಍	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ೠ	ೠ	ಌ	಍	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ಌ	ಌ	಍	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ
಍	಍	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ಏ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ
ಐ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ಏ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ
ಐ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ಏ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ
ಐ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ
ಏ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ
ಐ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಏ	ಐ	ಐ

ಕೃಪೆ: ಇದರಂತೆಯೇ ಗ.ಕೆ.ಎಚ್.ಎಲ್.ಎಚ್

Figure 6. A chart showing alphabet of Amaragannada scripts along with their equivalent in Kannada script (from Devarakondareddy, 2002).

In the above chart we can identify three distinct types of Amaragannada script. The columns 4 and 5 belong to one type 3. The column 6 belongs to type 4. Rest belongs to type 1.

ಋಣಾಂಶಗಳಿಗಿ

ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ
ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ
ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ
ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ
ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ
ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ	ಓ

Figure 7. A chart showing alphabet of Type 5 and 6 along with their equivalent in Kannada script. It also shows guruve gati written in Type 1 in the beginning (from Soppimatha, 1988).

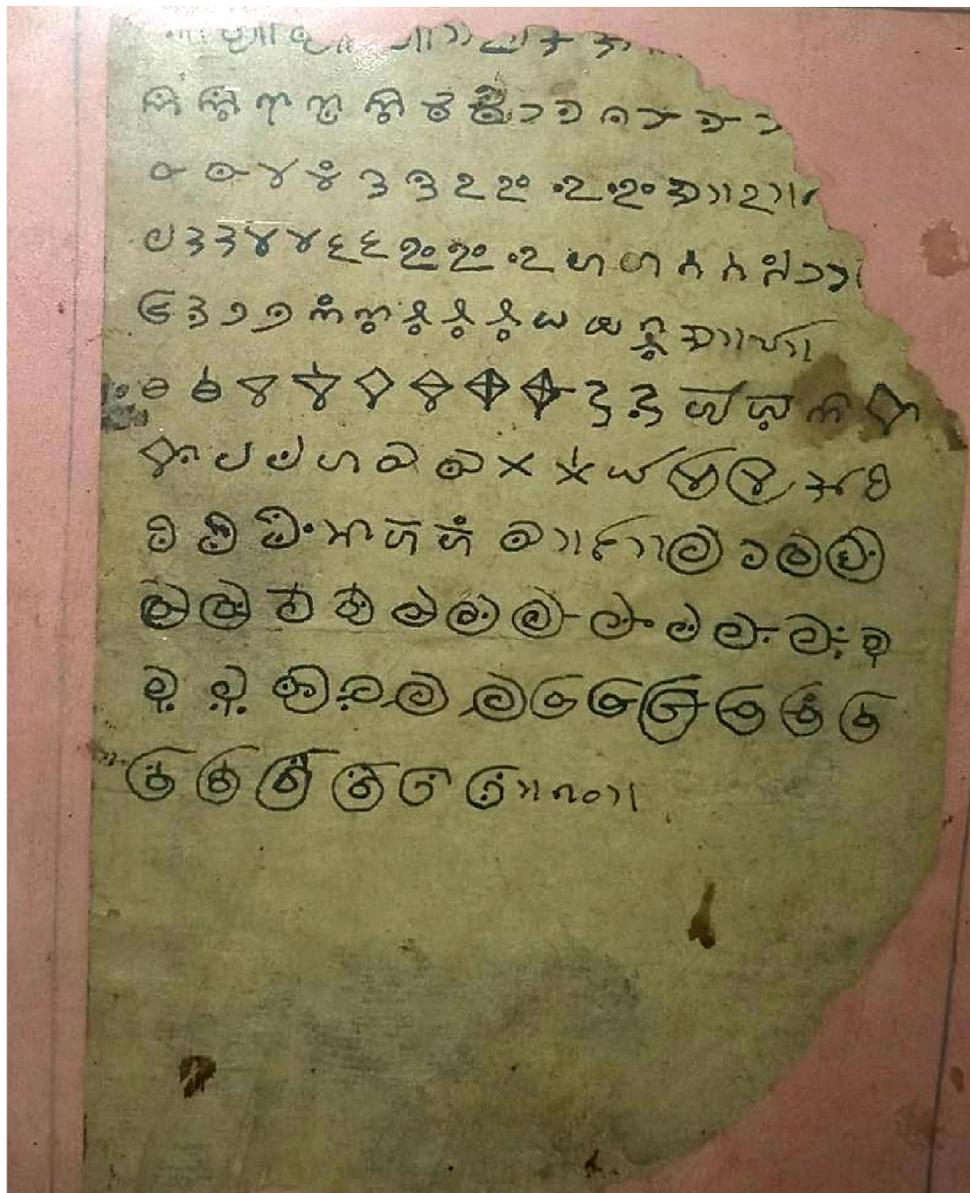


Figure 9. A manuscript containing character inventories (Varnamala) of Amaragannada up to ten scripts. The folio is damaged and first six scripts are missing.