

<p>Kādinava (9 letters from "Ka", plus "Ñ" for 0): Ka-Kha-Ga-Gha-Ņa-Ca-Cha*-Ja-Jha-Ņa* Ṭādinava (9 letters from "Ṭa", plus "N" for 0): Ṭa-Ṭha-Ḍa*-Ḍha*-Ņa*-Ṭa-Tha*-Da-Dha-Na Pādipañca (5 letters from "Pa"): Pa-Pha*-Ba*-Bha-Ma Yādyāṣṭa (8 letters from "Ya"): Ya-Ra-La-Va-Ṣa-Ṣa-Sa-Ha</p>	<p>Tips: repeat the first two syllables of a mela name, each resulting in a number-pair; and remember: "K" stands for 1", and "N stands for 0 (zero)". Reversing "K-N" yields "01", as indicated below: "K-N=10><01". Next: go through all melas sharing the second numbers "2" (02 to 72), "3" (03 to 63), "4" (04 to 64) etc. Explore: check all "twin numbers" (11, 22 ... 66), and find preferred letters for melas containing "0", "1", "2", "3" etc.</p>
01. Kanakāṅgi K-N=10><01	37. Sālagam S-L=73><37
02. Ratnāṅgi R-N=20><02	38. Jalārṇavam J-L=83><38
03. Gānamūrti G-N=30><03	39. Jhālavarāli Jh-L=93><39
04. Vanaspati V-N=40><04	40. Navanītam N-V=04><40
05. Mānavati M-N=50><05	41. Pāvani P-V=14><41
06. Tānarūpi T-N=60><06	42. Raghupriya R-Gh=24><42
07. Sēnāvati S-N=70><07	43. Gavāmbōdhi G-V=34><43
08. Hanumatōḍi H-N=80><08	44. Bhavapriya Bh-V=44><44
09. Dhēnuka Dh-N=90><09	45. Śubhapantuvarāli Ś-Bh=54><45
10. Nāṭakapriya N-Ṭ=01><10	46. Ṣaḍvidhamārgiṇi Ṣ-V=64><46
11. Kōkilapriya K-K=11><11	47. Suvarṇāṅgi S-V=74><47
12. Rūpāvati R-P=21><12	48. Divyamaṇi D~Vy=84><48
13. Gāyakapriya G-Y=31><13	49. Dhavalāmbari Dh-V=94><49
14. Vakulābharaṇam V-K=41><14	50. Nāmanārāyaṇi N-M=05><50
15. Māyāmājavagauḷa M-Y=51><15	51. Kāmavardhani K-M=15><51
16. Cakravākam C~Kr=61=16	52. Rāmapriya R-M=25><52
17. Sūryakāntam S-Y=71><17	53. Gamaṇāśrama G-M=35><53
18. Hāṭakāmbari H-Ṭ=81><18	54. Viśvambhari V~Śv=45><54
19. Jhankāradhvani Jh-K=91><19	55. Śyāmalāṅgi Śy~M=55><55
20. Naṭhabhairavi N-Ṭh=02><20	56. Ṣaṇmukhapriya Ṣ-M=65><56
21. Kīravāṇi K-R=12><21	57. Simhēndramadhyamam S~Mh=75><57
22. Kharaharapriya Kh-R=22><22	58. Hēmāvati H-M=85><58
23. Gaurīmanōhari G-R=32><23	59. Dharmavati Dh-M=95><59
24. Varuṇapriya V-R=42><24	60. Nītimati N-T=06><60
25. Māraraṅjani M-R=52><25	61. Kāntāmaṇi K-T=16><61
26. Cārukēsi C-R=62><26	62. Riṣabhapriya R-Ṣ=26><62
27. Sarasāṅgi S-R=72><27	63. Latāṅgi L-T=36><63
28. Harikāmbhōji H-R=82><28	64. Vācaspati V-C=46><64
29. Dhīrāśankarābharaṇam Dh-R=92><29	65. Mēcakalyāṇi M-C=56><65
30. Nāgānandini N-G=03><30	66. Citrāmbari C~Tr=66><66
31. Yāgapriya Y-G=13><31	67. Sucaritra S-C=76><67
32. Rāgavardhani R-G=23><32	68. Jyōtisvarūpiṇi Jy~T=86><68
33. Gāṅgēyabhūṣaṇi G-G=33><33	69. Dhātuvardhani Dh-T=96><69
34. Vāgadhīsvari V-G=43><34	70. Nāsikābhūṣaṇi N-S=07><70
35. Śūlini Ś-L=53><35	71. Kōsalam K-S=17><71
36. Calanāṭa C-L=63><36	72. Rasikapriya R-S=27><72
Note: * letters not used for Govindachari's mela-initials	Note: ~ overriding the conjunct consonant in lower-case

The Kaṭapayādi sūtra as applied to the names of 72 mēlakartā rāgas ("melas")

Numbers indicated by consonants matching the arrangement of letters in the Sanskrit alphabet	1	2	3	4	5	6	7	8	9	0
Kādinava (9 letters from "Ka", plus "Ñ" for 0): 1 to 5 are <i>gutturals</i> (arising from the throat); and 6 to 0 are <i>palatals</i> (arising from the back of the palate) Ka-Kha-Ga-Gha-Ña-Ca-Cha*-Ja-Jha-Ña*	ka क	kha ख	ga ग	gha घ	ña ङ	ca च	[cha छ]	ja ज	jha झ	[ña ञ]
Tādinava (9 letters from "Ta", plus "N" for 0): 1 to 5 are <i>retroflex</i> (with tongue touching the roof of the mouth); and 6 to 0 are <i>dentals</i> (with tongue touching the back of the teeth) Ṭa-Ṭha-Ḍa*-Ḍha*-Ṇa*-Ta-Tha*-Da-Dha-Na	ṭa ट	ṭha ठ	[ḍa ढ]	[ḍha ढ्ह]	[ṇa ण]	ta त	[tha थ]	da द	dha ध	na न
Pādipañca (5 letters from "Pa"): five <i>labials</i> (arising from the lips) Pa-Pha*-Ba*-Bha-Ma	pa प	[pha फ]	[ba ब]	bha भ	ma म					
Yādyasṭa (8 letters from "Ya" including three variants of "S": <i>palatal Ś</i> , <i>retroflex Ṣ</i> and <i>dental "S"</i>) Ya-Ra-La-Va-Śa-Ṣa-Sa-Ha	ya य	ra र	la ल	va व	śa श	ṣa ष	sa स	ha ह		
* marks the letters not used for Govindachari's mēla-initials e.g. [ña ञ]										
Tip: to memorize the <i>Kaṭapayādi sūtra</i> recite the entire series aloud as follows: Ka Kha Ga Gha Ṇa Ca Cha Ja Jha Ṇa Ṭa Ṭha Ḍa Ḍha Ṇa Ta Tha Da Dha Na Pa Pha Ba Bha Ma Ya Ra La Va Śa Ṣa Sa Ha										

Notes (conventions and pronunciation)

The eight letters enclosed by [square brackets] do not figure in Govindachari's 18th c. *mēlakartā* scheme: they are not found among the two key syllables added or used for mnemonic purposes.

For the *Kaṭapayādi sūtra* to work it is important to clearly pronounce the "h" as transliterated according to Sanskrit conventions for consonants: for instance kha ख and gha घ are distinct aspirated consonants. For example, "kh" is pronounced as in *inkhorn*, and "gh" as in *log house*; and "th" as in *anthill* etc.

Apply this to *mēlakartā* ragas by pronouncing "Naṭhabhairavi" as to ensure that the letter combination "Naṭha" matches numbers "0" and "2", then reversed to indicate the raga's 20th position in the *mēlakartā* scheme (i.e. Naṭhabhairavi with the aspirated "ṭh", not "Naṭabhairavi").

In Sanskrit all consonants contain an "a" unless modified (ka, kha etc.), pronounced as "u" in *but*. This is substituted by other vowels occurring in the names of *mēlakartā* ragas like Kīravāṇi and Kōkilapriya.

Guttural Ṇ (ña ङ) is pronounced like in river Gaṅgā.

Cerebral consonant Ṇ is not applied in the melakarta scheme [ṇa ण].

Three consonants corresponding to numbers 5, 6 and 7 – "ś", "ṣ" and "s" – represent three distinct sounds (**palatal ś**, **retroflex ṣ** and **dental s**); these are pronounced as in *she*, *partial* and *sit*; in Śyāmaṅgi (mēla 55), Ṣaṅmukhapriya (mēla 56) and Simhēndramadhyama (mēla 57) respectively

Sanskrit vowels (a अ, ā आ, i इ, ī ई, u उ, ū ऊ, e ए, ai ऐ, o ओ, au औ, ṛ / ṝ ऋ, ṝ / ṝ̄ ॠ, ḷ / ḹ लृ, ḹ / ḹ̄ लॄ) and some consonant clusters (kṣa क्ष, tra त्र, jña ञ and śra श्र) are excluded in the above table as they are not needed for the purpose of mēla mnemonics (*Kaṭapayādi sūtra*). Some of these do, of course, figure in the "full names" of *mēlakartā* and other ragas like Gamanaśrama (mēla 53).

For learners' convenience all long vowels seen in the names of *mēlakartā* ragas are marked as such (including those that are always considered as "long" in Sanskrit (ē, ai, ō and au); e.g. Hēmāvati, Kōsalam. Pronounce long Sanskrit vowels approximately as "ā" as in *father*, "ī" as "ee" in *deep*, "ū" as "oo" in *root*, "ē" as "ei" in *reign*, "ai" as "i" in *fine*, "ō" as in *noble*, and "au" as "ow" in *vow*).