चतुर्थोऽध्यायः

रत्ननिरूपणीयः

रत्ननिरूपणम्

मणयोऽपि च विज्ञेयाः सूतबन्धनकारकाः ।
देहस्य धारकाः नृणां जराव्याधिविनाशकाः ॥ 1 ॥

मणयः

वैक्रान्तः सूर्यकान्तश्च हीरकं मौक्तिकं मणिः ।
चन्द्रकान्तस्तथा चैव राजावर्त्तश्च सप्तमः ।
गरुडोद्गारकश्चैव ज्ञातव्या मणयस्त्वमी ॥ 2 ॥
पुष्परागं च गोमेदः पद्मरागः प्रवालकम् ।
वैदूर्यं च तथा नीलमेतेऽपि मणयो मताः ।
यत्नतः संग्रहीतव्या रसबन्धस्य कारणात् ॥ 3 ॥

श्रेष्ठरत्नानि–

पद्मरागेन्द्रनीलाख्यौ तथा मरकतोत्तमः ।
पुष्परागः सवज्राख्यः पंचरत्नवराः स्मृताः ॥ 4 ॥

नवग्रहाणां नवरत्नानि–

माणिक्यमुक्ताफलविद्रुमाणि
ताक्ष्यंच पुष्पं भिदुरञ्च नीलम् ।
गोमेदकंचाथ विदूरकञ्च
क्रमेण रत्नानि नवग्रहाणाम् ॥ 5 ॥

ग्रहानुमैत्र्या कुरुविन्दपुष्प-
प्रवालमुक्ताफलताक्ष्यंवज्रम् ।
नीलाख्यगोमेदविदूरकञ्च
क्रमेण मुद्राधृतमिष्टसिद्धयै ॥ 6 ॥

रत्नोपयोगाः –

रसे रसायने दाने धारणे देवतार्चने ।
सुरम्याणि सुजातीनि रत्नान्युक्तानि सिद्धये ॥ 7 ॥

अथ माणिक्यम् –

भेदाः –

माणिक्यं पद्मरागाख्यं द्वितीयं नीलगन्धि च ॥ 8 ॥

श्रेष्ठमाणिक्यगुणाः

कुशेशयदलच्छायं स्वच्छं स्निग्ध गुरु स्फुटम् ।
वृत्तायतं समं गात्रं माणिक्यं श्रेष्ठमुच्यते ॥ 9 ॥
नीलं गंगाम्बुसम्भूतं नीलगर्भारुणच्छयिवः।
पूर्वमाणिक्यवच्छ्रेष्ठं माणिक्यं नीलगन्धि तत् ॥ 10 ॥

माणिक्यदोषाः –

रन्ध्रकार्कश्यमालिन्यरौक्ष्यवैशद्यसंयुतम् ।
चिपिटं लघुवक्रञ्च माणिक्यं दुष्टमष्टधा ॥ 11 ॥

माणिक्यगुणकर्माणि–

माणिक्यं दीपनं वृष्यं कफवातक्षयार्तिनुत् ।
भूतवेतालपापघ्नं कर्मजव्याधिनाशनम् ॥ 12 ॥

अथ मौक्तिकम् –

श्रेष्ठ मुक्तागुणाः –

ह्लादि श्वेतं लघु स्निग्धं रश्मिवन्निर्मलं महत् ।
ख्यातं तोयप्रभं वृत्तं मौक्तिकं नवधा शुभम् ॥ 13 ॥

मुक्तागुणकर्माणि–

मुक्ताफलं लघु हिमं मधुरं च कान्ति-
दृष्ट्यग्निपुष्टिकरणं विषहारि भेदि ।
वीर्यप्रदं जलनिधेर्जनिता च शुक्ति-
र्दीप्ता च पक्तिरुजमाशु हरेदवश्यम् ॥ 14 ॥
कफपित्तक्षयध्वंसि कासश्वासाग्निमान्द्यनुत् ।
पुष्टिदं वृष्यमायुष्यं दाहघ्नं मौक्तिकं मतम् ॥ 15 ॥

मुक्ता दोषाः –

रुक्षांगं निर्जलं श्यावं ताम्राभं लवणोपमम् ।
अर्धशुभ्रं च विकटं ग्रन्थिलं मौक्तिकं त्यजेत् ॥ 16 ॥

अथ प्रवालम्–

श्रेष्ठप्रवाल गुणाः

पक्वबिम्बिफलच्छायं वृत्तायतमवक्रकम् ।
स्निग्धमव्रणकं स्थूलं प्रवालं सप्तधा शुभम् ॥ 17 ॥

प्रवालदोषाः

पाण्डुरं धूसरं रूक्षं सव्रणं कोटरान्वितम् ।
निर्भारं शुभ्रवर्णञ्च प्रवालं नैष्यतेऽशुभम् ॥ 18 ॥

प्रवालगुणकर्माणि –

क्षयपित्तासृकासघ्नं दीपनं पाचनं लघु ।
विषभूतादिशमनं विद्रुमं नेत्ररोगनुत् ॥ 19 ॥

अथ तार्क्ष्यम् –

श्रेष्ठतार्क्ष्यगुणाः

हरिद्वर्णं गुरु स्निग्धं स्फुरद्रश्मिचयं शुभम् ।
मसृणं भासुरं तार्क्ष्यं गात्रं सप्तगुणं मतम् ॥ 20 ॥

तार्क्ष्यदोषाः

कपिलं कर्कशं नीलं पाण्डुकृष्णं मलान्वितम् ।
चिपिटं विकटं रूक्षं लघु तार्क्ष्य न शस्यते ॥ 21 ॥

तार्क्ष्यगुणकर्माणि–

ज्वरच्छर्दिविषश्वाससन्निपाताग्निमान्द्यनुत् ।
दुर्नामपाण्डुशोफघ्नं तार्क्ष्यमोजोविवर्धनम् ॥ 22 ॥

अथ पुष्परागम्–

श्रेष्ठपुष्परागगुणाः

पुष्परागं गुरु स्निग्धं स्वच्छं स्थूलं समं मृदु ।
कर्णिकारप्रसूनाभं मसृणं शुभमष्टधा ॥ 23 ॥

पुष्परागदोषाः –

निष्प्रभं कर्कशं रूक्षं पीतश्यामं नतोन्नतम् ।
कपिशं कपिलं पाण्डु पुष्परागं परित्यजेत् ॥ 24 ॥

पुष्परागगुणकर्माणि–
पुष्परागं विषच्छर्दिकफवाताग्निमान्द्यनुत् ।
दाहकुष्ठाम्लशमनं दीपनं पाचनं लघु ॥ 25 ॥

अथ वज्रम् –

वज्र भेदाः –

वज्रं च त्रिविधं प्रोक्तं नरो नारी नपुंसकम् ।
पूर्वंपूर्वमिह श्रेष्ठं रसवीर्यविपाकतः ॥ 26 ॥

पुंवज्रगुणाः –
अष्टास्रञ्चाष्टफलकं षट्कोणमतिभासुरम् ।
अम्बुदेन्द्रधनुर्वारितरं पुंवज्रंमुच्यते ॥ 27 ॥

स्त्रीवज्रगुणाः –
तदेव चिपिटाकारं स्त्रीवज्र वर्तुलायतम् ।

नपुंसकवज्रगुणाः ’
वर्तुलं कुण्ठकोणाग्रं किंचिद्गुरु नपुंसकम् ॥ 28 ॥

प्रत्येकस्योपयोगित्वम् –
स्त्रीपुन्नपुंसकं वज्रं योज्यं स्त्रीपुन्नपुंसके ।
व्यत्यासान्नैव फलदं पुंवज्रेण विना क्वचित् ॥ 29 ॥

वर्णानुसारेण वज्रभेदाः –
श्वेतादिवर्णभेदेन तदेकैकं चतुर्विधम् ।
ब्रह्मक्षत्रियविटशूद्रं स्वस्ववर्णफलप्रदम् ॥ 30 ॥
उत्तमोत्तमवर्णं हि नीचवर्णफलप्रदम् ।
न्यायोऽयं भैरवेणोक्तो पदार्थेष्वखिलेष्वपि ॥ 31 ॥

वज्रगुणकर्माणि–
आयुष्प्रदं झटिति सद्गुणदञ्च वृष्यं
दोषत्रयप्रशमनं सकलामयघ्नम् ।
सूतेन्द्रबन्धवधसद्गुणकृत्प्रदीप्तं
मृत्युञ्जयं तदमृतोपममेव वज्रम् ॥ 32 ॥

रत्नदोषाः–
ग्रासस्त्रासश्च बिन्दुश्च रेखा च जलगर्भता ।

सर्वरत्नेष्वमी पंचदोषाः साधारणाः मताः ।।
क्षेत्रतोयभवा दोषा रत्नेषु न लगन्ति हि ॥ 33 ॥

वज्रशोधनम् –

कुलत्थक्वाथके स्विन्नं कोद्रवक्वथितेन वा ।
एकयामावधि स्विन्नं वज्रं शुध्यति निश्चितम् ॥ 34 ॥

वज्रमारणम् :–

प्रथमविधिः

वज्रं मत्कुणरक्तेन चतुर्वारं विभावितम् ।
सुगन्धिमूषिकामांसैर्वर्त्तितैः परिवेष्ट्य च ॥ 35 ॥
पुटेत्पुटैर्वराहाख्यैस्त्रिंशद्वारं ततः परम् ।
ध्मात्वा ध्मात्वा शतं वारान्कुलत्थक्वाथके क्षिपेत् ॥ 36 ॥
अन्यैरुक्तः शतं वारान्कर्तव्योऽयं विधिः क्रमात् ॥ 37 ॥

द्वितीयोविधिः –

कुलत्थक्वाथसंयुक्तलकुचद्रवपिष्टया ।
शिलया लिप्तमूषायां वज्रं क्षिप्त्या निरुध्य च ॥ 38 ॥
अष्टवारं पुटेत्सम्यग्विशुष्कैश्च वनोपलैः ।
शतवारं ततो ध्मात्वा निक्षिप्तं शुद्धपारदे ।।
निश्चितं म्रियते वज्रं भस्म वारितरं भवेत् ॥ 39 ॥

सत्यवाक् सोमसेनानीरेतद्वज्रस्य मारणम् ।
दृष्टप्रत्ययसंयुक्तमुक्तवान् रसकौतुकी ॥ 40 ॥

तृतीयोविधिः –

विलिप्तं मत्कुणस्यास्रैः सप्तवारं विशोषितम् ।
कासमर्दरसापूर्णे लौहपात्रे निवेशितम् ॥ 41 ॥
सप्तवारं परिध्मातं वज्रभस्म भवेत्खलु ।
ब्रह्मज्योतिमुनीन्द्रेण क्रमोऽयं परिकीर्तितः ॥ 42 ॥

चतुर्थोविधिः –

नीलज्योतिलताकन्दे घृष्टं धर्मे विशोषितम् ।
वज्रं भस्मत्वमायाति कर्मवज्ञानवह्निना ॥ 43 ॥

पंचमोविधिः –

मदनस्य फलोद्भूतरसेन क्षोणीनागकैः ।
कृतकल्केन संलिप्य पुटेद्विंशतिवारकम् ॥ 44 ॥

वज्रचूर्णं भवेद्वर्यं योजयेच्च रसादिषु ॥ 45 ॥
वज्रप्रयोगविधिः –
तद्वज्रं चूर्णयित्वाथ किंचिट्टंकणसंयुतम् ।
खरभूनागसत्वेन विंशेनावर्तयेदध्रुवम ।।
तुल्यस्वर्णेन तद्ध्मातं योजनीयं रसादिषु ॥ 46 ॥
त्रिगुणेन रसेनैव सम्मर्द्य गुटिकीकृतम् ।
मुखे धृतं करोत्याशु चलद्दन्तविबन्धनम् ॥ 47 ॥
वज्ररसायनम्–
त्रिंशद्भागमितं हि वज्रभसितं स्वर्णं कलाभागिकम् ।
तारं चाष्टगुणं सितामृतवरं रुद्रांशकं चाभ्रकम् ।।
पादांशं खलु ताप्यकं वसुगुणं वैक्रान्तकं षड्गुणम् ।
भागोऽप्युक्तरसं रसोऽयमुदितः षाड्गुण्य सिद्धये ॥ 48

अथ नीलम् –

नीलभेदाः –
जलनीलेन्द्रनीलञ्च शक्रनीलं तयोर्वरम् ॥ 49 ॥
शक्रनीलगुणाः –
श्वैत्यगर्भितनीलाभं लघु तज्जलनीलकम् ।
काष्ण्यगर्भितनीलाभं सभारं शक्रनीलकम् ॥ 50 ॥
श्रेष्ठनीलगुणाः –
एकच्छायं गुरु स्निग्धं स्वच्छं पिण्डितविग्रहम् ।
मृदु मध्ये लसज्ज्योतिः सप्तधा नीलमुत्तमम् ॥ 51 ॥
जलनीलदोषाः –
कोमलं विहतं रूक्ष निर्भारं रक्तसन्धि च ।
चिपिटाभं सुसूक्ष्मञ्च जलनीलं हि सप्तधा ॥ 52 ॥
नीलगुणकर्माणि –
श्वासकासहरं वृष्यं त्रिदोषघ्नं सुदीपनम् ।
विषमज्वरदुर्नामपापघ्नं नीलमीरितम् ॥ 53 ॥

अथ गोमेदः

गोमेदस्य निरुक्तिः –
गोमेदः समरागत्वाद्गोमेदं रत्नमुच्यते ।

श्रेष्ठगोमेदगुणाः –

सुस्वच्छगोजलच्छायं स्वच्छं स्निग्धं समं गुरु ।
निर्दलं मसृणं दीप्तं गोमेदं शुभमष्टधा ॥ 54 ॥

गोमेद दोषाः –

विच्छायं लघु रूक्षाङ्गं चिपिटं पटलान्वितम् ।
निष्प्रभं पीतकाचाभं गोमेदं न शुभावहम् ॥ 55 ॥

गोमेद गुणकर्माणि

गोमेदं कफपित्तघ्नं क्षयपाण्डुक्षयङ्करम् ।
दीपनं पाचनं रुच्यं त्वच्यं बुद्धिप्रबोधनम् ॥ 56 ॥

अथ वैदूर्यम् –

श्रेष्ठवैदूर्यगुणाः –

वैदूर्यं श्यामशुभ्राभं समं स्वच्छं गुरु स्फुटम् ।
अभ्रशुभ्रोत्तरीयेण गर्भितं शुभमीरितम् ॥ 57 ॥

वैदूर्यदोषाः –

श्यामं तोयसमच्छायं चिपिटं लघुकर्कशम् ।
रक्तगर्भोत्तरीयं च वैदूर्यं नैव शस्यते ॥ 58 ॥

वैदूर्यगुणकर्माणि–

वैदूर्यं रक्तपित्तघ्नं प्रज्ञायुर्बलवर्धनम् ।
पित्तप्रधानरोगघ्नं दीपनं मलमोचनम् ॥ 59 ॥

रत्नानां शोधनम् –

शुद्धर्यत्यम्लेन माणिक्यं जयन्त्या मौक्तिकं तथा ।
विद्रुमं क्षारवर्गेण तार्क्ष्यं गोदुग्धकैस्तथा ॥ 60 ॥
पुष्परागं च सन्धानैः कुलत्थक्वाथसंयुतैः ।
तन्दुलीयजलैर्वज्रं नीलं नीलीरसेन च ॥ 61 ॥
रोचनाभिश्च गोमेदं वैदूर्यं त्रिफलाजलैः ॥ 62 ॥

रत्नानां मारणम् –

लकुचद्रावसंपिष्टैः शिलागन्धकतालकैः ।
वज्रं विनान्यरत्नानि म्रियन्तेऽष्टपुटैः खलु ॥ 63 ॥

रत्नद्रावणविधिः –

रामठं पंचलवणं क्षाराणां त्रितयं तथा ।
मांसद्रवोम्लवेतश्च चुल्लिकालवणं तथा ॥ 64 ॥

स्थूलं कुम्भीफलं पक्वं तथा ज्वालामुखी शुभा ।
द्रवन्ती च रुदन्ती च पयस्या चित्रमूलकम् ॥ 65 ॥
दुग्धं स्नुह्यास्तथाऽर्कस्य सर्वं सम्मर्द्य यत्नतः ।
गोलं विधाय तन्मध्ये प्रक्षिपेत्तदनन्तरम् ॥ 66 ॥
गुणवन्नवरत्नानि जातिमन्ति शुभानि च ।
भूर्जे तं गोलकं कृत्वा सूत्रेणावेष्ट्य यत्नतः ॥ 67 ॥
पुनर्वस्त्रेण संवेष्ट्य दोलायन्त्रे निधाय च ।
सर्वाम्लयुक्तसन्धानपरिपूर्णघटोदरे ॥ 68 ॥
अहोरात्रत्रयं यावत्स्वेदयेत्तीव्रवह्निना ।
तस्मादाहृत्य संक्षाल्य रत्नजां द्रुतिमाहरेत् ।

रत्नद्रुतिस्वरूपम्–
रत्नतुल्यप्रभा लघ्वी देहलोहकरी शुभा ॥ 69 ॥

मुक्ताद्रावणम्–
मुक्ताचूर्णं तु सप्ताहं वेतसाम्लेन मर्दितम ।
जम्बीशेदरमध्ये तु धान्यराशौ विनिक्षिपेत् ॥ 70 ॥
सप्ताहादुद्धृतं चैव पुटे धृत्वा द्रुतिर्भवित् ॥ 71 ॥

वज्रद्रावणम्–
वज्रवल्यन्तरस्थं कृत्वा वज्रं निरोधयेत् ।
अम्लभाण्डगतं स्वेद्यं सप्ताहाद्द्रवतां व्रजेत् ॥ 72 ॥

वैक्रान्तद्रावणम् –
श्वेतवर्णं तु वैक्रान्तमम्लवेतसभावितम् ।
सप्ताहान्नात्र सन्देहः खरघर्मे द्रवत्यलम् ॥ 73 ॥
केतकीस्वरसं ग्राह्यं सैन्धवं स्वर्णपुष्पिका ।
इन्द्रगोपकसंयुक्तं सर्वं भाण्डे विनिक्षिपेत् ।
सप्ताहं स्वेदयेत्तस्मिन्वैक्रान्तं द्रवतां व्रजेत् ॥ 74 ॥
लोहाष्टके तथा वज्रे वापनात्स्वेदनाद्द्रुतिः ।
जायते नात्र सन्देहो योगस्यास्य प्रभावतः ॥ 75 ॥
कुरूते योगराजोऽयं रत्नानां द्रावणं परम् ॥ 76 ॥

रत्नद्रुतिस्थापनाविधिः –
कुसुम्भतैलमध्ये तु संस्थाप्या द्रुतयः पृथक् ।
तिष्ठन्ति चिरकालं तु प्राप्ते कार्ये नियोजयेत् ॥ 77 ॥

रत्नधारणगुणाः –

सूर्यादिग्रहनिग्रहापहरणं दीर्घायुरारोग्यदं
सौभाग्योदयभाग्यवश्यविभवोत्साहप्रदं धैर्यकृत् ।
दुश्छायाञ्चलधूलिसंगतिभवाऽलक्ष्मीहरं सर्वदा
रत्नानां परिधारणं निगदितं भूतादिनिर्नाशनम् ॥ 78 ॥

अथोपरत्ननिरूपणम्–

सूर्यकान्तगुणकर्माणि –

रविकान्तो भवेदुष्णो निर्मलश्च रसायनः ।
वातश्लेष्महरो मेध्यः पूजनाद्रवितुष्टिदः ॥ 1 ॥

श्रेष्ठसूर्यकान्तगुणाः –

शुद्धः स्निग्धो निर्व्रणो निस्तुषोऽन्त-
र्यो निघृष्टोऽत्यन्तनैर्मल्यमेति ।
यः सूर्यांशुस्पर्शनिस्यूतबह्नि-
र्जात्यः सोऽयं कथ्यते सूर्यकान्तः ॥ 2 ॥

चन्द्रकान्तगुणकर्माणि

शिशिरश्चन्द्रकान्तस्तु स्निग्धः पित्तास्रतापनुत् ।
शिवप्रीतिकरः स्वच्छो ग्रहालक्ष्मीविनाशनः ॥ 3 ॥ ॥

श्रेष्ठचन्द्रकान्तगुणाः –

स्निग्धं शीतं पीतमत्रासमन्तः
धत्ते चित्ते स्वच्छतां यन्मुनीनाम् ।
यश्च स्रावं याति चन्द्रांशुसंगाद्
जात्यं रत्नं चन्द्रकान्ताख्यमेतत् ॥ 4 ॥

श्रेष्ठराजावर्तगुणाः –

राजावर्तोऽल्परक्तोरुनीलिमामिश्रितप्रभः ।
गुरुश्च मसृणः श्रेष्ठस्तदन्यो मध्यमः स्मृतः ॥ 5 ॥

राजावर्तगुणकर्माणि–

प्रमेहक्षयदुर्नामपाण्डुश्लेष्मानिलापहः ।
दीपनः पाचनो वृष्यो राजावर्तो रसायनः ॥ 6 ॥

राजावर्तशोधनम्–

निम्बुद्रवैः सगोमूत्रैः सक्षारैः स्वेदिताः खलु ।
द्वित्रिवारेण शुद्ध्यन्ति राजावर्तादिधातवः ॥ 7 ॥

शिरीषपुष्पार्द्ररसैः राजावर्तं विशोधयेत् ॥ 8 ॥

राजावर्तमारणम्–

लुंगाम्बुगन्धकोपेतो राजावर्तो विचूर्णितः ।
पुटनात्सप्तवारेण राजावर्तो मृतो भवेत् ॥ 9 ॥

राजावर्तसत्वपातनम् –

राजावर्तस्य चूर्णन्तु कुनटीघृतमिश्रितम् ।
विपचेदायसे पात्रे महिषीक्षीरसंयुतम् ॥ 10 ॥
सौभाग्यपंचगव्येन पिण्डीबद्धन्तु जारयेत् ।
ध्मापितं खदिरांगारैः सत्वं मुञ्चति शोभनम् ॥ 11 ॥
अनेन क्रमयोगेन गैरिकं विमलं भवेत् ।
क्रमात् पीतञ्च रक्तञ्च सत्त्वं पतति शोभनम् ॥ 12 ॥

स्फटिकगुणकर्माणि–

स्फटिकः समवीर्यः स्यात् पित्तदाहार्तिशोषनुत् ।
तस्याक्षमालां जपतां दत्ते कोटिगुणं फलम् ॥ 13 ॥

श्रेष्ठस्फटिकगुणाः –

यद् गंगातोयबिन्दुच्छवि विमलतमं निस्तुषं नेत्र्यहृद्यम् ।
स्निग्धं शुद्धान्तरालं मधुरमतिहिमं पित्तदाहास्रहारि ।
पाषाणैर्यन्निघृष्टं स्फुटितमपि निजां स्वच्छतां नैव जह्यात्
तज्जात्यं जात्वलभ्यं शुभमुपतनुते शैवरत्नं विचित्रम् ॥ 14 ॥

इति श्रीवैद्यपतिसिंहगुप्तस्य सूनोर्वाग्भट्टाचार्यस्य कृतौ रसरत्नसमुच्चये रत्नानां शुद्ध्यादिनिरूपणं नाम चतुर्थोऽध्यायः ॥ 4 ॥

FOURTH CHAPTER

ENGLISH TRANSLATION

DESCRIPTION OF GEMS

DESCRIPTION OF GEMS *(RATNA NIRŪPAṆA)*

Precious stones are also mentioned to be used for the *bandhana* (fixation/solidification/binding) of *pārada* (mercury). (1)

Names of Precious Stones :

Vaikrānta (tourmaline), *sūryakānta* (Sun stone), *hīraka* (diamond), *mauktika maṇi*[1] (pearl), *candrakānta* (Moon stone), *rājā varta* (lapis lazuli) and the seventh *garuḍodgāra* (emerald) are known as precious stones. (2)

Puṣparāga (topaz), *gomeda* (hessonite), *padmarāga* (ruby), *pravāla* (coral), *vaidūrya* (cat's eye) and *nīlam* (sapphire) are also considered as precious stones. Due to their usefulness in *Rasabandhana* (binding of mercury) these should also be collected with care. (3)

Superior precious stones :

Padmarāga (ruby), *indra nīla* (sapphire), *marakata* (emerald), *puṣparāga* (topaz) along with *vajra* (diamond) are considered as the five superior precious stones. (4)

Precious Stones for Nine Planets :

Māṇikya (ruby), *muktāphala* (pearl), *vidruma* (coral), *tārkṣya* (emerald), *puṣparāga* (topaz), *bhidura* (diamond), *nīlam* (sapphire), *gomedaka* (hessonite/zircon) and *vidūraka* (cat's eye) are the nine gems for the nine planets, Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, Dragon's head and Dragon's tail, respectively. (5)

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[1] The word *maṇi* is generally used to indicate jewel or precious stone. But in this context *maṇi* is an adjective of *mauktika* which is not a stone. However, due to its preciousness it was also considered as *maṇi* and included in this group of precious stones.

Other opinion regarding favourite precious stones of the planets :

On the basis of friendly relationship of the precious stones with the nine planets, such as Sun, Moon, the following precious stones, namely *kuruvinda* (ruby), *puṣparāga* (topaz), *pravāla* (coral), *muktāphala* (pearl), *tārkṣya* (emerald), *vajra* (diamond), *Nīlam* (sapphire), *gomeda* (hessonite/zircon), and *vidūraka* (cat's eye), respectively, may prove helpful in achieving one's desired effects/success when borne in finger rings. (6)

Utility of the best quality gems :

The precious stones possessing superior characteristics and of superior variety only, are recommended for success in mercurial processes, for achieving positive health, for donations, for bearing in finger rings or on the body, and for adoration of gods. (7)

MĀṆIKYA (RUBY)

Varieties of ruby :

Ruby is of two varieties : one is *padmarāga* and the other is *nīlagandhi.*

Characteristics of the best ruby :

The best ruby is that which possesses a shade like that of red lotus, is transparent, brilliant, heavy, clear, oval or spherical in shape, and uniform on all sides. (8,9)

Characteristics of nīlagandhi ruby :

That ruby, which is bluish in colour, supposed to have emerged from Gaṅgā water, looks reddish with bluish tinge in its body, and possesses all the best qualities similar to the former variety, is called *nīlagandhi* ruby. (10)

Eight defects of ruby :

The ruby, which has holes/fissures/apertures, roughness, dirt on surface, dryness, haziness and spots, and is concave, light and curved, is considered as defective. These are the eight defects of ruby. (11)

Pharmaco-therapeutic properties of ruby :

Ruby is stomachic *(dīpana),* promoter of testicular function *(vṛṣya),* destroys the diseases caused by *kapha doṣa, vāta doṣa* and *kṣaya* (wasting of

body tissues), removes the effects caused by evil spirits like *bhūta, vetāla* and also sins, and cures the diseases caused by the deeds *(karmas)* of the past life. (12)

MUKTĀ (PEARL)

Characteristics of best quality pearl :

The pearl possessing the following nine qualities, *viz.*, pleasing appearance or inducing pleasant feeling, white, light, brilliant, transparent like rays, large in shape and size, water drop like lustre and spherical in shape is considered the best and auspicious. (13)

Pharmaco-therapeutic properties of pearl :

The pearl is considered to destroy the diseases caused by *kapha* and *pitta doṣas* and also *kṣaya, kāsa, śvāsa* and *agnimāndya.* It gives nourishment to the body tissues, acts as promoter of testicular function *(vṛṣya)* and longevity producer *(āyuṣya)* and destroys burning sensation *(dāha).* (14,15)

Defects of pearl :

A pearl should be rejected if it is dull in appearance, does not possess a lustre like water drop, is blackish, reddish or salt like or half white in colour, shapeless, and full of knots on its surface. (16)

PRAVĀLA (CORAL)

Characteristics of best coral :

A good coral should have the following seven qualities, *viz.*, red colour like ripe *bimbīphala,* cylindrical, long and uncurved, brilliant, free from fissures and holes on its surface, and thick in appearance. (17)

Defects of coral :

A coral having the following seven defects, *viz.*, paleness, yellowishness, dullness, whiteness, dryness, lightness and fissures and holes is not considered good. (18)

Pharmaco-therapeutic properties of coral :

Coral can cure the diseases caused by *kṣaya (dhātukṣaya), pitta* and *rakta*

doṣa and also *kāsa*. It is stomachic, digestive and light (easy to digest). It can neutralise the effects of poisons and evil spirits and destroys eye troubles. (19)

TĀRKṢYA (EMERALD)

Characteristics of best emerald :

The best emerald should have the following seven qualities, *i.e.* it should be green, heavy, brilliant,emanating sharp light rays, auspicious, smooth, and very bright. (20)

Defects of emerald :

Emerald containing following defects is not recommended. The defects are monkey colour, rough surface, blue, pale and blackish shades, dirty and concave appearance, ugliness, dryness and lightness. (21)

Pharmaco-therapeutic properties of emerald :

Emerald can cure fevers *(jvara)*, vomiting *(chardi)*, poisonous effects *(viṣa)*, dyspnoea/asthma *(śvāsa)*, *sannipāta* and indigestion *(agnimāndya)*. It can also cure piles *(arśa)*, anaemia *(pāṇḍu)* and oedema/inflammation *(śopha)*, and can improve vital force *(ojas)* of the body. (22)

PUṢPARĀGA (TOPAZ)

Characteristics of best topaz :

Topaz having the following eight characterisitcs, *viz.*, heavy, brilliant, transparent, large, uniform, tender, yellow like *karṇikāra puṣpa*, and smooth is considered the best. (23)

Defects of topaz :

A topaz having the following defects such as dull or lustreless, rough and dry, concave or convex surface, yellowish black, brownish, yellow, pale or monkey colour is considered inferior. (24)

Pharmaco-therapeutic properties of topaz :

Topaz cures the poisonous effects *(viṣa prabhāvas)* and vomiting *(chardi)*, pacifies *kapha* and *vāta doṣas*, destroys indigestion *(agnimāndya)*, burning sense *(dāha)*, skin-lesions *(kuṣṭha),asra(rakta) roga*. It is stomachic *(dīpana)*, digestive *(pācana)* and easy to digest *(laghu)*. (25)

VAJRA (DIAMOND)

Varieties of diamond :

Diamond is of three varieties, *viz.*, *nara* (masculine), *nārī* (feminine) and *napuṃsaka* (neuter). From the point of view of *rasa*, *vīrya* and *vipāka*, i.e., pharmacologically, a preceding variety is considered relatively better. (26)

Characteristics of each variety of diamond :

Masculine diamond : That which has eight edges, eight surfaces and six angles, which is very bright, possess rainbow like colours and which is relatively light *(vāritara)* is called as the best masculine diamond.

Feminine diamond : If the same diamond with the above qualities looks concave/flat and cylindrical it is considered a feminine diamond.

Neuter diamond : If it is spherical, blunt at the tip of the angles and comparatively heavy, it is considered as a neuter diamond.

The masculine, feminine and neuter varieties of diamonds are useful in male, female and neuter subjects, respectively. If used otherwise these may not give good result except the masculine variety which is claimed good for all.

On the basis of colour each of the above mentioned varieties may be subdivided into four types, *i.e.*, white, red, yellow, and black. These are also called *brāhmaṇa, kṣatriya, vaiśya,* and *śūdra*, respectively. When used in their own caste *(varṇa)*, these produce desired effects. However, a diamond belonging to a higher caste may prove useful in lower caste persons also.

According to the ruling of Lord Bhairava, this rule is applicable for all the substances, though it has been said in the context of diamonds only. (27-31)

Pharmaco-therapeutic properties of diamond :

On internal use diamonds prolong life, produce immediate good results, and act as the best promoter of testicular functions. They can pacify all the three *doṣas (vāta, pitta* and *kapha)* and can cure all the diseases. They are also capable of fixing/binding or incinerating mercury. Pharmacologically, diamonds are stomachic and can conquer death like ambrosia. (32)

Common defects of gems :

Five common defects of gems are described. These are (1) black spot *(grāsa)*, (2) grain/discolouration *(trāsa)*, (3) spots due to erosion *(bindu)*, (4) lines/boundaries *(rekhā)*, and (5) bubbles *(jalagarbhatā)*. Earth and water born defects are not found in gems, hence these are said to be free from the effects of earth and water. (33)

Pharmaceutical processes :

Śodhana of diamond :

Diamond is surely purified by boiling it in the decoction of *kulattha (Dolichos biflorus* Linn.) or *kodrava (Paspalum scrobiculatum* Linn.) for one *yāma* (3 hours). (34)

Māraṇa of diamond :

Process I : Diamond immersed in the blood of bed bugs four times and covered with the roasted flesh of a rat having a specific good smell should be subjected to *varāha puṭa* heating thirty times. Thereafter, it should be subjected to strong heating and dipping in the decoction of *kulattha* one hundred times. By this method it is converted into ashes. According to others, the whole process should be repeated for hundred times. (35-37)

Process II : *Manaḥśilā* (realgar) ground with the juice of *lakuca (Artocarpus lakoocha* Roxb.) and mixed with the decoction of *kulattha* should be pasted inside a crucible and the diamonds, put in the crucible and sealed, should be subjected to heating eight times using dried cow-dung cakes. Thereafter, these are subjected to strong heating and dipping into pure mercury one hundred times. By this method diamonds are converted into ashes definitely and this ash is claimed to be *vāritara* (floatable in water).

Soma Senāni, who is an expert in *Rasa Śāstra* and who is truth speaking and well experienced in this branch, has described this method for converting diamonds into ashes. (38-40)

Process III : Diamonds, seven times coated with the blood of bed bugs and dried should be heated strongly and dropped in an iron vessel full of *kāsamarda rasa* (juice of *Cassia oxydentales).* By repeating the process seven times diamonds turn into ash surely. This method has been described by a scholar named Brahma Jyoti Munīndra. (41-42)

Process IV : Diamonds also turn into ash if rubbed with the juice of *nīla jyoti latā (Indigofera tinctoria* Linn.) *kanda* and dried in sun light, turn into ash just like the *pāpa karmas* (evil deeds), which become destroyed or burnt to ashes with the fire of knowledge. (43)

Process V : A paste of earth worms with the juice of *madana phala (Redendia dumatorund* Lam.) is prepared and applied to diamonds ; these are subjected to heating twenty times by *puṭa* system. By this way also these are reduced to fine powder of superior quality which is considered suitable for preparing *rasa* medicines. (44-45)

Method of use :

Diamonds reduced to powder form by the above processes, should be mixed with a little borax *(ṭaṅkaṇa)* and 1/20th part *khaṛa satva* extracted from the earth worms, and heated strongly twenty times. Thereafter it should again be heated strongly with equal part of gold. Diamonds thus heated definitely become suitable for using in *rasādi* (marcurial) medicinal preparations.

The same (ash), mixed with three times mercury and made into tablets, when kept in mouth, make the loose tooth very strong immediately. (46,47)

Vajra rasāyana :

Thirty parts of diamond ash, sixteen parts of gold ash, eight parts of silver ash, eleven parts of purified *sveta amṛta (viṣa) curna*, four parts of mica ash, eight parts of copper pyrite ash, and six parts of tourmaline ash, all mixed together are known as *vajra rasayana*. One part of this *rasāyana* is said to provide all the *ṣaḍguṇas* (the six qualities) to a man on internal use. (48)

NĪLAM (SAPPHIRE)

Varieties : Sapphire is said to have two varieties, one is *jala nīla* and the other is *indra/śakra nīla*. Of the two *śakra nīla* is better than *jala nīla*. (49)

Characteristics of jala nīla :

That which is bluish from outside and white from inside and light in weight is *jala nīla*.

Characteristics of indra/śakra nīla :

That which is bluish from outside and blackish from inside and heavy in weight is *śakra nīla*. (50)

Characteristics of best sapphire :

The best sapphire should have the following seven qualities, *viz.*, uniform colour, heaviness, brilliancy, transparency, round appearance, softness, and containing radiating brilliance in its centre. (51)

Defects of jala nīla :

Jala nīla with the following seven qualities, *viz.*, tenderness, variated colours, dry look, light weight, reddish tinge, concave or flat surface and very thin or small size is defective. (52)

Pharmaco-therapeutic properties of sapphire :

Sapphire is said to destroy dyspnoea *(śvāsa)* and cough *(kāsa)*, promotes testicular function *(vṛṣya)*, pacifies all the three *doṣas*, acts as best stomachic *(sudipanam)*, destroys irregular/intermittent fevers *(viṣamajvara)*, piles *(durnāma)*, and the sins. (53)

GOMEDA (HESSONITE/ZIRCON) :

As the gem looks similar to cow's fat *(gomeda)* it is called *gomeda* (hessonite).

Characteristics of best hessonite :

The best *gomeda* is that which possesses the following eight characteristics, *viz.*, colour or shade like cow's urine, transparency, brilliancy, uniformity, heavyness, free from lamellae/layers, smoothness and splendid look. (54)

Defects of gomeda :

The hessonite having the defects such as *vicchāya* (shade not similar to cow's fat/urine), light in weight, dry, flat/concave surface, containing lamellae/layers, lustreless and looking like a yellow glass is not considered good. (55)

Pharmaco-therapeutic properties of gomeda :

Gomeda destroys *kapha* and *pitta doṣas*, wasting *(kṣaya)* and anaemia *(pāṇḍu) rogas*, acts as stomachic and digestive agent, induces relishness, improves complexion of skin and arouses intelligence. (56)

VAIDŪRYA (CAT'S EYE) :

Characteristics of the best cat's eye (vaidūrya) :

The best *vaidūrya* is that which is darkish and whitish in colour, uniform, transparent, heavy in weight, clean and contains a white fibre like structure similar to white upper garment, or white cloud. (57)

Defects of vaidūrya :

Vaidūrya having the defects such as dark colour, water like shade, flat/concave surface, light weight, roughness and red lines like a red outer garment is not considered good. (58)

Pharmaco-therapeutic properties :

Vaidurya destroys *raktapitta*, increases intelligence, longevity and strength, destroys the diseases caused mainly by *pitta doṣa*, is claimed to be stomachic and digestive stimulant, and clears the bowels. (59)

General Śodhana method for Precious Stones :

The general purification of all the gems may be done as follows .

The purification of *manikya* (ruby) is done with *amla varga* (acidic group) liquids, of *mukta* (pearl) with *jayantīpatra rasa (Sesbania sesban murrill), of vidruma* (coral) with *kṣāra varga* (alkaline) liquids, of *tārkṣya* (emerald) with cow's milk, of *puṣparāga* (topaz) with *sandhāna varga* drugs (fermented acidic liquids mixed with the decoction of *kulattha), of vajra* (diamond) with *taṇḍulīya jala* (liquid of *Amaranthus polygoroids), of nīlam* (sapphire) with *nīlīrasa* (juice of *Indigofera tinctoria* Linn.), of *gomeda* with *rocana jala* (bright yellow bile pigment obtained from cattle) and of *vaidūrya* (cat's eye) with *triphalā jala* (decoction of triphalā). General *śodhana* of the gems is done with the *svedana* (boiling in liquids) process, *i.e.*, as per tradition, the gems are boiled with the specific liquids by *dolāyantra* method for three hours. (60-62)

General Māraṇa (incineration) methods for gems :

All the precious stones except diamond should be killed (made to ashes) by anointing a paste made of *manaḥśilā* (realgar), *gandhaka* (sulphur) and *tālaka* (orpiment) with the juice of *lakuca (Artocarpus lakooche* Roxb.) and thereafter subjecting them to heating eight times by *puta* system. By this method all the gems are definitely converted to ashes. (63)

Ratna Drāvana (liquefaction of gems) :

The liquefaction of gems is done as follows.

A paste of the drugs *rāmaṭha (hiṅgu),* five *lavaṇas,* three *kṣāras, māṃsa drava, amlavetasa (Garcinia pedunculata* Roxb.), *cullikā lavaṇa,* large and ripe *kumbhī phala,* good variety of *jvālāmukhī (Gloriosa superbà* Linn), *dravantī (Croton tiglium.* Linn.), *rudantī (Capparismoonii wight), payasyā (Holostemma rheedianum* Spreng.) and *citraka mūla* (roots of *Plumbago zeylanica* Linn.) is prepared by adding *snuhī dugdha* (latex of *Euphorbia nerilifolia)* and *arka dugdha* (latex of *Calatropis procera)* and grinding carefully.

The paste of the above drugs is then made into a bolus and purified gems which possess superior characteristics, auspicious and of good quality are put inside the bolus. The bolus is wrapped in *bhūrjapatra* (leaves of *Betula utilis.*

Don.) tied carefully with thread, put in a cloth piece and suspended in *dolāyantra* filled with acidic formented liquid associated with other acidic substances. This is to be heated (boiled) by applying strong fire for three days and nights. In the end it should be taken away, washed and the *druti* of *ratnas* may be collected. It (the *druti*) possesses the shade of the gem from which it is prepared, is light in weight and good for *dehakarma* and *lohakarma.* (64-69)

Liquefaction of muktā :

Powdered pearl should be ground with the juice of *amlavetasa* for seven days and then it may be put inside *jambīra phala.* This should now be kept inside *dhānyarāśi* (heap of grain). After seven days it should be taken out and heated by the *puṭa* system. Thus, liquefaction of *muktā* is achieved. (70-71)

Liquefaction of diamond :

Powdered diamond should be put inside the *kalka* of *vajravallī (Holistropium indicum)* and wrapped with cloth. Thereafter it should be boiled in an earthen pot containing acidic liquid for seven days. This would facilitate the *druti* (liquefaction) of *vajra* (diamond). (72)

Liquefaction of vaikrānta :

The whitish tourmuline triturated with the juice of *amlavetasa* and kept in bright sunshine for seven days converts itself into liquid state. (73)

Second Method : To the juice of *ketakī (Strychnos potatorum)* are added *saindhava* (rock salt), *svarṇapuṣpī (Cassia fistula.* Linn.) and *indragopa* (a red insect). A pot containing *vaikrānta* is filled with this juice and subjected to heating to boiling *(svedana). Vaikrānta* thus boiled for seven days converts itself into liquefied state. (74)

Utility of vaikrānta druti :

The *druti* of *vaikrānta* obtained as above, poured on metals or boiled with any of the eight metals and/or diamond definitely renders them into liquefied state. This is the specific effect of this recipe. This method definitely achieves the liquefaction of all the gem stones. (75-76)

Method of preserving the druti for a long time :

If the *druti* of any material is kept separately into *kuṣumbha taila* (oil of *Carthamus tinctorius.* Linn.), it remains unaltered (in the same state) for a long time, and whenever necessary it could be used for the desired purposes. (77)

Effect of bearing of gems :

The bearing of gems is said to destroy the ill effects of planets. (Sun, Moon, *etc.*), impart longevity and good health, arouses fortune, makes the man

popular in the society and improves his will-power which are dependent on the fortune. This also generates courage/patience and removes the misfortune/unhappiness or poverty caused by the effects of evil spirits, polluted air and bad association. Further, this is also claimed to destroy the effects of devils/bad elements. (78) (1)

DESCRIPTION OF SEMI-PRECIOUS STONES :

| *Note*—According to Prof. D.A. Kulkarni, this chapter contains only 78 verses in the original text. But looking to the requirement of the text Prof. Kulkarni recommended to include the following 14 verses also in this chapter, which are devoted to the description of semi-precious stones useful in medicine. The present author agrees with this view and describes these below.| (2)

SŪRYAKĀNTA (SUN-STONE)

Pharmaco-therapeutic properties of sūryakānta (Sun-stone/Aligo-clays) :

Sun-stone is considered hot in potency *(uṣṇa* in *vīrya)*, free from impurity/toxicity, possessing rejuvenating (rasāyana) property. It destroys *vāta* and *kapha doṣas*, acts as brain-tonic *(medhya)*, and pleases the planet Sun by its worship.

Physical Properties :

It is claimed that the pure (good quality) sun-stone is brilliant, unhurt, free from chaff, attains more brightness on rubbing and when comes in contact with sun rays shines in such a way as if generating a fire. Such sun-stone is considered to be the best. (1-2)

CANDRAKĀNTA (MOON-STONE)

Pharmaco-therapeutic properties of candra kānta :

Superior quality *candra kānta* is considered to have the following properties. It is cold in touch and potency *(śiśira* in *vīrya)*, unctuous, destroys *pitta* and *rakta doṣas* and burning sensation, makes Lord Śiva pleased, looks transparent and destroys the misfortune produced by the ill effect of planets (specially of moon). (3)

Physical properties of best candrakānta :

(*Candrakānta* is cool to touch, as clear and transparent as the mind and thoughts of the sages and appears like a secreting flow of discharge when in contact with the moon-rays. Such moon-stone is considered to be the best. (4)

RĀJĀVARTA (LAPIS-LAZULI)

Characteristics of the best rājāvarta :

The best quality *rājāvarta* is that which possesses a mixed shade of blue and slightly red colours and is heavy and smooth. *Rājāvarta* other than this is considered as of medium quality. (5)

Pharmaco-therapeutic properties of rājāvarta :

The lapis lazuli destroys urinary disorders *(prameha)*, wasting diseases *(kṣaya)*, piles *(durnāma)*, anaemia *(pāṇḍu)*, *kapha* and *vāta doṣas*. It is stomachic/digestion stimulant, digestive agent, best promoter of testicular function, and rejuvenator of life *(rasāyana)*. *(6)*

Śodhana of rājāvarta :

Ist Method—Minerals like *rājāvarta* are purified by boilingthemtwo or three times with lemon juice *(nimbu drava)* associated with cow's urine *(gomūtra)*, and alkaline liquid *(kṣāra drava)* by the method of *dolāyantra*. (7)

IInd Method—*Rājāvarta* may also be purified by boiling it with the juices of *śirīṣa puṣpa* (flower of *Albizzia lebbeck* Benth.) and ginger *(ārdraka)*. (8)

Māraṇa of rājāvarta :

Powdered *rājāvarta* mixed with sulphur and ground with the juice of *mātuluṅga (Citrus medica)* is converted to ashes *(mṛta)* when heated seven times by the system of *puṭa*. (9)

Satvapātana of rājāvarta :

Powdered *rājāvarta* should be mixed with ghee and realgar *(manaḥśilā)* and heated in an iron pot along with buffalo milk. Thereafter it should be mixed with borax and *pañca gavya* and made in a bolus form. These are then heated strongly using fire of *khadira* wood *(khadirāṅgāra)*. By this method the good variety *satva* (essence/metal content) can be extracted from it. (10-11)

Śodhana and satvapātana of gairika :

The method mentioned above is also applicable in case of *gairika* to purify it, and to extract its best quality *satva* having yellow and red colours, respectively. (12)

[*Note :* The 12th verse describing the *gairika śodhana* and *satvapātana* should not be described in the context of *uparatnas*. However, due to the similarity of the method Prof. Kulkarni proposed to describe it here.]

SPHAṬIKA (QUARTZ)

Pharmaco-therapeutic properties of sphaṭika :

Potency of *sphaṭika* is neither hot nor cold. It destroys *pitta doṣa*, burning *(dāha)*, and wasting diseases *(śoṣa roga)*. If one enchants any sacred text/hymn using the garland *(mālā)* made of this gem *(maṇi)* the above mentioned effects of *sphaṭika* could be achieved million times multiplied. (13)

Characteristics of best sphaṭika :

That *sphaṭika* is considered the best which possess the following characteristics, *viz.*, a shade like those of *Gangā* water drops, very clear, free from chaff, good looking, having pleasant appearance, brilliancy and clear inner structure. It should be sweet in taste, should have very cooling effect, should destroy *pitta*, *dāha* and *asra* (blood) *dosa*. When rubbed on stone it should not loose its transparency even if it is broken. It is generally claimed to be rare but if achieved proves very auspicious. Thus, this *śaiva ratna* (a gem very favourite to Lord Siva) possesses multiplicity of effects. (14)

RASA RATNA SAMUCCAYA

NOTES ON THE FOURTH CHAPTER

RATNAS (GEMS STONES)

Ratnas are those which are considered the best with regards to qualities and properties in their respective groups. Some scholars mentioned that some substances are known as *ratnas* because of their high cost, shining and bright appearance and a few other superior qualities, and on account of these superior characteristics and qualities these are liked by rich persons.

Generally *ratnas* are stone materials but a few animal products are also included in this group because of their high cost and superior characteristics and qualities. In modern literature these are called gems or precious stones. In ancient literature *ratnas*, on the basis of their characteristics, are divided into two groups, *viz.*, (1) *ratnas* (precious stones) and (2) *uparatnas* (semiprecious stones).

In this chapter nine *ratnas* have been described in detail and in the end a few drugs of the *uparatna* group have also been described, though these are not found mentioned in the original text. The relationship of the nine *ratnas* with the nine planets is also mentioned in *Rasa Ratna Samuccaya*. This is shown in Table 1.

TABLE 1

The nine ratnas (gems), their hindi and english names and their relationship with the nine planets (grahas)

Name of the Gem	Hindi name	English name	Name of the Planet *(graha)*
Māṇikya	*Māṇika*	Ruby	*Sūrya* - Sun
Muktā	*Moti*	Pearl	*Candra* - Moon
Vidrum	*Muṅgā*	Coral	*Maṅgala* - Mars
Tārkṣya	*Pānnā*	Emerald	*Budha* - Mercury
Puṣparāga	*Pukharāja*	Topaz	*Guru* - Jupiter
Bhidura	*Hīrā*	Diamond	*Śukra* - Venus
Nīlam	*Nīlā*	Sapphire	*Śani* - Saturn
Gomedaka	*Gomeda*	Hessonite	*Rāhu* - Dragon's head
Vidūraka	*Vaidūrya*	Cat's eye	*Ketu* - Dragon's tail

In this way *mānikya* and the other gems are claimed to be related with the nine planets, Sun and the others, respectively. In other words these gems could be used to please the respective planets or to remove their ill effects. For this purpose superior quality gem only should be used for wearing, donation and also for using internally.

Qualities of best ratnas (gems) :

The best quality gem should be clear, light, shining or glittering, and must possess various surfaces and angles. According to modern view gems should be beautiful, durable, rare, costly and portable. The beauty of a gem depends upon its transparency, clarity, brilliancy, colour, lustre, and shining appearance. These qualities could best be seen when the gems are cut and polished.

Defects of ratnas :

In ancient texts five defects of gems are described. These are *grāsa, trāsa, bindu, rekhā,* and *jalagarbhatā.* According to modern terminology these may be explained as :*grāsa* means black spots, *trāsa* means discolouration or presence of grains, *bindu* means erosions, *rekhā* means lines or boundaries, and *jalagarbhatā* means presence of bubbles. Gems are claimed to be free from earth and water born defects.

Origin of ratnas :

It is claimed in ancient texts that *ratnas* got originated from the shining eyes of angry Mahākāla engaged in the drying of sea at the end of *pralaya.*

It is also mentioned that mountains, rocks, the sea and animals are important sources of the *ratnas.*

Superior-most ratnas :

Of the nine gems the following five, *viz., padmarāga* (ruby), *indra nīla* (sapphire), *marakata* (emerald), *puṣparāga* (topaz) and *vajra* (diamond) are considered to be the superior-most *ratnas.* These possess all the qualities of best *ratnas.*

Common uses of ratnas :

Rasendra Cūḍāmaṇi mentions the following uses of *ratnas. Ratnas* are used for *rasa karmas* (mercurial processes) and *rasāyana karmas* (rejuvenating and/or therapeutic purposes) in addition to *dāna* (donation), *dhāraṇa* (wearing) and *devatārcanā* (adoration of gods/planets). It is further stated that they not only check the ill effects of *grahas* (planets) but can also grant longevity, wealth, fortune, courage and energy to the human beings and remove poverty, misery, misfortune and the influence of evil spirits.

Pharmacotherapeutic effects of ratnas :

Ratnas are generally *madhura* (sweet) and *kaṣāya* (astringent) in *rasa* (taste), *śīta* and *sara* in *guṇas* (property/potency), *dīpana* (stomachic), *kānti vardhana* (improve complexion), *agni. vardhaka* (digestive), *vilekhana* (anti-obese), *viṣahara* (anti-poison) and *netrāmayahara* (destroyer of eye diseases). Further, on account of their cooling property and potency all the gems are claimed to pacify *pitta doṣa* in particular and *tridoṣas* in general. These are the properties of *ratnas* alone but if *ratnas* are mixed or used in combination with mercury they may prove still more effective, *i.e.*, just like *amṛta* (nectar), in preventing senility and mortality.

Processing of ratnas :

Just like metals and minerals *ratnas* also need some processing before they are subjected to internal use for therapeutic purposes.

Śodhana (purification) :

Though it is mentioned in the texts that the *ratnas* do not necessarily require purification as in their cases no bad effects are observed even if they are used without purification a common method, however, for their purification is found mentioned in the texts which probably helps in removing their external impurities, if any, and in reducing their hardness to a large extent so that their conversion to fine subdivisions become easier. This treatment may also help in enhancing their pharmacotherapeutic properties. For purification, specific *śodhana* drugs are recommended for different gems but the process remains common for all the gems. (Table-2)

TABLE 2

Śodhana of different gems

Gem	Śodhana drug
Māṇikya	*Amla varga* drugs (acidic group of liquids).
Muktā	*Jayantīpatra rasa* (juice of *Jayanti* leaves).
Pravāla	*Kṣāravarga* drugs (alkaline liquids).
Tārkṣya	*Godugdha* (cow's milk).
Puṣparāga	*Sandhāna varga* (fermented acidic liquids). *Kulattha kvātha* (decoction of kulatha).
Vajra	*Tandulīya jala.*
Nīla	*Nīlī rasa.*
Gomeda	*Gorocanā jala* (liquid of bright yellow pigment obtained from cattles).
Vaidūrya	*Triphalā kvātha.* *Uttamā kvātha.*
Process :	*Svedana* (boiling in liquids) for one *yāma* (3 hours). *Nirvāpa* (heating and quenching) several times (100 times).
Apparatus :	*Dolāyantra.* (heating pan).

Effect of śodhana :

By *svedana*, external or soluble impurities present in the gems may be removed and by *nirvāpa* or *niṣecana* hardness of the gems could be reduced to some extent and they are made brittle.

Māraṇa (incineration) :

Just like *śodhana* a common procedure for *māraṇa* (incineration) for all the gems except *vajra* (diamond) is also mentioned in the *RRS.*

Procedure : The gems (except diamond) are smeared with a paste made of *manaḥśilā* (realgar), *gandhaka* (sulphur) and *tālaka* (orpiment) by triturating these three with the juice of *lakuca.* These are then closed in a *śarāva sampuṭa* and subjected to heating eight times by *puṭa* system. By this method all the gems are converted to ashes without any doubt. *Gajapuṭa* heat is used for incineration of gems.

Drāvaṇa (liquefaction) of ratnas :

Just like *śodhana* and *māraṇa* a common method for *ratna drāvaṇa* (liquefaction of gems) is also found mentioned in the *RRS.* The process is known as *druti.* In this process solid gems are converted into liquid state and maintained in this state for ever.

Procedure : A paste of *rāmaṭha* (asafoetida), five *lavaṇas*, three *kṣāras*, *amlavetasa*, *culhikā lavaṇa*, large and ripe *kumbhiphala*, *jvālāmukhī*, *dravantī*, *rudantī*, *payasyā* and *citraka mūla* is prepared by adding *snuhī dugdha*, *arka dugdha* and *māṃsa drava* and triturating carefully. Inside a bolus of this paste, purified best quality gems are put and the bolus is wrapped with *bhurja patra* and carefully tied with thread. This is then put in a cloth piece to make bundle and the bundle is suspended like a *dolā* in a pot filled with fermented acidic liquid associated with other acidic extractives. The pot is subjected to heating by *svedana* method (boiling) on strong fire for three days and nights. In the end the bundle is taken away from *dolāyantra* and the *druti* of *ratnas* is collected. The shade of the *druti* should closely resemble the colour of the gem from which it is prepared. It is light in weight and may be used for both *dehakarma* and *lohakarma.*

Method of preserving drutis for a long time :

If the *druti* of any gem is kept into *kusumbha taila*, it remains unaltered (in the same state) for a long time, and whenever required it may be used for the desired purpose.

The physical characteristics of superior and inferior varieties of each gem are then described in this chapter, along with their pharmacotherapeutic

properties. And in case of diamond a detailed description of its varieties, characteristics, properties and processing are found described.

DESCRIPTION OF INDIVIDUAL GEMS

MĀṆIKYA (RUBY) Al_2O_3

Modern description

Chemically ruby is aluminium oxide but also contains iron, chromium, and titanium oxides in traces. Its colour is deep red due to the presence of iron and chromium in small amounts. Its hardness is 9 and sp. gr. 4. Its crystals are hexagonal and its lustre is vitreous.

Ruby occurs in Burma, Sri Lanka and India, and specially in Mysore and Orissa. The ruby obtained from Burma is considered to be the best.

Varieties of ruby :

According to *Rasa* texts :	1. *Padmarāga* - Red,
	2. *Nīlagandhi* - Bluish red.
According to Sanskrit text :	1. *Kuruvinda,*
	2. *Saugandhika.*
According to colour :	1. Red,
	2. Yellowish,
	3. Greenish *(aśokapatrachāyā).*
	4. Reddish yellow *(tumburucchāya).*

Synonyms of ruby :

Padmarāga, vasuratna, suratnaka, kuruvinda.

Physical varieties :

Superior variety—Ruby of superior variety should be deep red just like *guñjā* (dried berry of *Arbus precatorius)* or *indragopa* (cochineal), should have shine like lotus, should be transparent, oval, smooth, clear, uneven and big in size. Besides these, it should emanate red rays on coming in contact with the morning sun, put in milk will make the milk look red, and on rubbing over the *nikaṣa* (touch stone) would shine much and look beautiful.

Inferior variety—The ruby having holes, rough and flat surface, dull appearance, light weight, uneven, and small in size is inferior.

According to *Yukti Kalpataru, māṇikya* is supposed to contain the following defects, *viz., vicchāya, virūpa, aśobhaṇa, dhūmravat paśubandhu vināśakṛt, parābhavakara, śaśtrāghātakara* and *sambhedan (jathara doṣakṛt).*

Pharmaco-therapeutic properties :

Rasa	-	*Madhura.*
Guṇa	-	*Snigdha, śīta, rūkṣa.*
Karma	-	*Sandīpana, vṛṣyatama. balya, rasāyana, medhya, hṛdya. āyuṣya, vājikara.*
Doṣa prabhāva	-	*Kapha vātahara, vātapittanut, tridoṣanāśana.*
Vyadhi prabhāva	-	*Karmaja roga, bhūtavaitālādijanyaroga, sūryagrahajanya roga (śiropīḍā, prameha, satata jvara, santata jvara* and *pitta roga), kṣayaroga, āmaśūla, hṛdroga, viṣūcikā, dāha jvara, hikkā, śirovraṇa, viṣaja roga.*

Processing of ruby :

1. *Śodhana :*

Śodhana drugs	-	*Nimbūrasa* or any *amladrava.*
Śodhana process	-	Subjected to *svedana* in *dolāyantra* for one *yāma.*

2. Māraṇa :

Māraṇa drugs	-	*Śilājatu, amla vetasa, culhikā lavaṇa, taṅkaṇa, manaḥśilā, haritāla, gandhaka, hiṅgula.*
Bhāvanā drugs	-	*Lakuca rasa, nimbū rasa, mayūra pitta.*
Bhāvanā process	-	*Puṭapāka.*
Number and types of *puṭas*	-	Eight– *Gajapuṭas.*
Colour of *bhasma*		*Pāṇḍura varṇa.*
Dose	-	1/4th to 1/2 *guñjā.*

Note - 1. *Māṇikya* is the most favourite gem of the planet Sun *(sūrya graha)* and hence should be worn on the body or used internally to please the planet sun and vanish its *prakopa* (ill effects).

2. Ruby and sapphire can be produced artificially. The synthetic corundums are very shining and bright and when small in size extremely difficult to distinguish from natural stones.

NĪLAM (SAPPHIRE) Al_2O_3

Modern description

Chemically *nīlamaṇi* is aluminium oxide but contains traces of cobalt,

which gives a blue colour to it. Colour of *nīlam* is deep blue. Except for its blue colour and the trace element there is no difference between *māṇikya* and *nīlam*. *Nīlam* also belongs to corundum group of stones. Good variety of sapphire is transparent and its colour varies from blue to white. Crystals are hexagonal, usually showing asterism.

Nīlam occurs in Burma, Sri Lanka, and India. In India it occurs specially in Jammu and Kashmir and near Vijayanagaram. Its hardness is 9 and sp. gr. 4.

Varieties of nīlam :

As per *Rasa* texts	1. *Indranīla* - Deep blue - Good.
	2. *Jalanīla* - Whitish blue - ordinary.
As per modern texts	1. Blue, violet.
	2. Yellow, golden yellow.
	3. Green.
	4. White.

Synonyms of nīlam :

Indranīla, Mahānīla, Śakranīla, Kṛṣṇamaṇī, Jalanīla.

Physical properties of nīlam :

Superior variety - *Nīlam* of superior variety should be deep blue in colour, possess one colour only, shall be heavy, clear, shining, beautiful, smooth, bright and round. *Mahānīla* and *indranīla* are such and their blue colour should resemble either the cloud or *atasīpuṣpa*. It makes milk or clear water look blue when put in them.

Inferior variety - The *nīlam* which is soft, light-red, rough, small, flat, has different colours in the two halves and contain blood like smell is inferior. According to *Rasa Praḳāśa Sudhākara jalanīla* is considered such.

Pharmaco-therapeutic properties :

Rasa	-	x
Guṇa	-	x
Karma	-	*Balya, vṛṣya, dīpana, rasāyana, medhya, hṛdya, tvacya, varṇya, viṣahara,* and *pāpaghna.*
Doṣa prabhāva	-	*Tridoṣaghna.*

Vyādhi-prabhāva - *Kāsa, svāsa, jvara, viṣama jvara, kuṣṭha, pāṇḍu, arśa, pāpajaroga, śanigrahajanya roga (yakṣmā, vātodara, mūrcchā, snāyuruk, kṛmī, pakṣāghāta, śvāsa, plīhāroga, jīrṇa-jvara, sarvāṅgavāta, hastapādaprakampa).*

Processing of nīlam :

Śodhana :

Śodhana drugs	-	*Nilīrasa.*
Śodhana process	-	*Svedana* in *dolāyantra* for one *yāma.*

Māraṇa :

Māraṇa drugs	-	*Mṛta vajracūrṇa.*
Bhāvanā drugs	-	*Mayūrapitta.*
Process	-	Roasting with *vajracūrṇa.* The process becomes easier if *mayūrapitta* is added and the gem ground with it and then roasted.

Note - *Nīlam* is the most favourite gem of the planet Śani and hence should be worn on the body or used internally to please the planet Śani and remove its *prakopa (bad effects).*

TĀRKṢYA (EMERALD OR BERYL) $BeO_3.Al_2O_3.6SiO_2$

Modern description

Chemically *tārkṣya* is berylium aluminium silicon oxide but it also contains chromium in traces which imparts a green colour to it. *Tārkṣya* has a shining deep green colour and its value is in proportion to its greenness, transparency and brightness. It is an intimate mixture of corundum, magnesite, hematite, quartz and spinel and may vary from dark grey to black. Initially it was considered to be an iron ore. Its hardness varies from 7 to 9.

Tārkṣya occurs in Columbia, Russia, China, Central Asia, Egypt and India. In India it is obtained from Kashmir, Punjab, Rajasthan, Madhya Pradesh, Bihar, Mysore and Coimbatore in small quantities.

Varieties of tārkṣya :

Varieties of *tārkṣya* are not mentioned in Āyurvedic *rasa* texts. However, in modern literature its three varieties based on colour are mentioned.

1. Green	-	Good.
2. Bluish	-	Medium.
3. Whitish	-	Ordinary.

Synonyms of emerald :

Tārkṣya, gārutmata, garuḍodgāra, dṛṣadgarbha, haritamaṇi.

Physical properties of emerald :

Superior variety - *Tārkṣya* of superior variety should be green like grass, leaf of banana or bamboo, should shine like sun rays, should be smooth, brilliant, heavy, big, and without holes and bubbles. Further, it should resemble peacock's neck in colour and appearance.

Inferior variety - *Tarksya* which is black, reddish black, blue and white, rough, flat, uneven, light small, contains holes and bubbles is inferior.

Pharmaco-therapeutic properties :

Rasa	-	*Madhura.*
Guṇa	-	*Śīta, snigdha.*
Vīrya	-	*Śīta.*
Karma	-	*Ojovardhana, balya vṛṣya, puṣṭikara, agnidīpana, pācana, rucikara, viṣaghna, bhūtabādhāhara.*
Doṣa prabhāva	-	*Sannipātanut.*
Vyādhi prabhāva	-	*Agnimāndya, amlapitta, chardi, arśa, śūla, jvara, śopha, pāṇḍu, śvāsa, sannipāta, viṣa* and *Budhagrahajanya roga (tvakroga, vātajapīḍā, vicarcikā, unmāda, jihvāroga, vamana, kaphaja* and *tridoṣaja vyadhis).*

Processing of tārkṣya :

Śodhana :

Śodhana drugs - *Godugdha.*

Śodhana process - *Svedana* in *dolāyantra* for one *yāma.*

Māraṇa : As per *māṇikya* or by general method.

Note - *Tārkṣya* is the most favourite gem of the planet Budha and hence should be worn on the body or used internally to please the planet Budha and vanish its *prokopa* (ill effects).

PUṢPARĀGA (TOPAZ) - $Al(FOH)SiO_4$

Modern description -

Chemically *puṣparāga* is fluorohydroxy aluminium silicate, containing

aluminium, fluorine, hydrogen, oxygen, and silicon. Its fluorine content varies from 15.5 to 20% and sometimes it does not contain hydrogen. It is also a corundum group stone. Its colour is wine yellow and it is claimed to resemble the flowers of *Cassia fistula*. It may also be greyish, light blue, violet, rosy, reddish in colour, or colourless. Its appearance is clear, shining and transparent, sometimes opaque also. Lustre is vitreous. Hardness is 8 and sp. gr. is 3.5. Crystals are orthorhombic, prismatic.

Puṣparāga occurs in North Asia, Burma, Brazil, Sri Lanka, Montana, and India (specially in Himalayas).

Varieties of puṣparāga :

Varieties of *puṣparāga* are not mentioned in *Rasa* texts, but in *Yukti Kalpataru* its two types are mentioned.

1. *Padmarāgākarodbhava.*
2. *Marakatākarodbhava.*

Synonyms of topaz :

Puṣparāga, mañjuratna, gururatna, pītamaṇi, vācaspativallabha.

Physical properties of topaz :

Superior variety - *Puṣparāga* of superior variety should be yellow like the flowers of *karṇikāra* or *campaka*, and should be heavy, smooth, clear, shining, even, big, soft and transparent. On rubbing over *nikaṣa* (touch stone) it should appear brighter and more shining.

Inferior variety - *Puṣparāga* which is reddish-yellow, blackish or pale, rough, uneven, lustreless, dull and less shining is inferior.

Pharmaco-therapeutic properties :

Rasa	-	*x*
Guṇa	-	*Laghu, śīta.*
Vīrya	-	*Śīta.*
Karma	-	*Dīpana, pācana, viṣaghna, medhya, bṛmhaṇa, āyuṣya, dāhapraśamana.*
Doṣa prabhāva	-	*Agnimāndya, chardi, viṣa dāha, mūtrakṛcchra, kuṣṭha, arśa* and *gurugrahajanyaroga (śiropīdā, medoroga, aṅghrivedanā, śvāsāvarodha).*

Processing of topaz :

Śodhana :

Śodhana drugs - *Dhānyāmla (Kāñjika), Kulattha kaṣāya.*

Śodhana process - *Svedana* in *dolāyantra* for one *yāma.*

Māraṇa : As for *māṇikya* or by the general method.

Note : *Puṣparāga* is the most favourite gem of the planet Guru and hence should be worn on the body or used internally to please the planet Guru and remove its *prakopa* (ill effects).

VAJRA (DIAMOND)

Modern description -

Chemically *Vajra* (diamond) contains carbon only and belongs to coal group. Hence when heated in open air in the presence of oxygen at high temperature CO_2 is produced from it. The difference between diamond and coal lies in their structure, *i.e.,* in diamond the carbon atoms are situated densely hence it is very hard. Its hardness is 10, and sp. gr. is 3.5. Diamond has no specific colour or is usually colourless but sometimes it is slightly yellowish, yellow, red, green, blue and rarely black. Its crystals are cubic, hexaoctohedral, often rounded or distorted. The crystals are transparent to translucent and opaque. The colourless diamonds are pure carbon but coloured stones may contain calcium, sodium, copper, silicon, aluminium, boron, iron and magnesium in traces. Diamond is unaffected by acids, is an excellent conductor of heat but poor conductor of electricity.

Till 17th A.D. diamond was not found in any other country except India. But now-a-days diamonds are found abundantly in Brazil, Australia, South Africa and India. Indian mines are situated in Vijayanagaram, Golkunda, Madras and Bundelkhanda. India and Borneo were the earliest sources of diamond.

Varieties of vajra :

On the basis of sex	- 1. *Nara vajra*	- Very good.
	2. *Nārī vajra*	- Good.
	3. *Napuṃsaka vajra*	- Inferior.
On the basis of colour	- 1. White, 2. Yellow, 3. Red, 4. Black.	
On the basis of castes	- 1. *Brāhmaṇa*	- Good for *Rasāyana karma.*
	2. *Kṣatriya*	- Good for *rogaharaṇa.*
	3. *Vaiśya*	- Good for lohakarma.
	4. *Śūdra*	- Good for *vayastambhana* and *vyādhi śamana.*

These diamonds are good for the respective castes. However, higher caste diamonds may be used in lower caste persons also, but as per the opinion of Bhairava, lower caste diamonds are not recommended for higher caste persons.

Synonyms of diamond :

Kuliśa, vajra, pavi, hīraka, bhārgavapriya.

Physical properties of diamonds :

Superior varieties - Diamonds of superior variety have eight edges, eight surfaces and six angles. It should be very attractive, shining, colourless, transparent, round, light and free from defects like line, spot, *etc.* Further, it should be very clear, white and shining like a star, and should reflect light from its transparent inner surface in different directions producing a very handsome play of colours, and sparkle very brilliantly. Superior variety diamond can cut all other substances but itself remains uncut on account of its extreme hardness.

Inferior variety - Diamonds which are thin and long, blue or ash coloured, rough, broken from one side, contain defects like *rekhā, kākapada,* are considered inferior. *Napuṃsaka vajra* belongs to inferior variety.

Male diamond *(nara vajra)* should have eight edges, eight surfaces and six angles, should be highly shining and exhibit many colours like rainbow. It should also be light *(vāritara),* round, and free from defects like line, spot, *etc.* Female diamond *(nārī vajra)* should have all the above characteristics of male diamond but its shape is flat or oval and rough and it may contain line and spot.

Both *nara vajra* and *nārī vajra* are considered to be of superior variety.

Diamond which is round, thin, long, does not have the edges, possess three angles, and heavy is *napuṃsaka vajra.* This is not recommended for use.

Pharmaco-therapeutic properties :

Rasa	-	*Ṣadrasa.*
Guṇa	-	*Snigdha.*
Karma		*Āyuprada, parama hṛdya, yogavāhī, pradīpana, vṛṣyatama, vayastambhakara, kāntijanana, saukhyajanana, rasāyana, sudhāsama, balaprada, netrya, medhya, rogaghna, mṛtyuhara, sarva siddhiprada, dravyakāri,, rasabandhakara, rasamāraka.*
Doṣa prabhāva	-	*Tridoṣaśamana.*

Vyādhi prabhāva	*Sakala roga, balipālita, rājayakṣmā, prameha, medoroga, pāṇḍu, śotha, udararoga, klaivya* and *mṛtyu.*
Nara vajra :	*Sarvadoṣāpaha, vedhaka, rasabandhakara, loha krāmaṇaśīla, satvayukta,* good for all.
Nārī vajra :	*Deha siddhiprada, dehakāntijanana,* specially good for ladies, less powerful.
Napuṃsaka vajra :	Possess less *krāmaṇa* power, is without satva, useful for *klības* (impotents) only.

Mythological origin :

Diamond is said to have originated from the fallen drops of *amṛta* (nectar), being drunk by the Gods and demons. Also said to have originated from the body of the demon Bali.

Processing of diamond :

Necessity of śodhana and mārana :

It is said in *Rasa Mañjarī* and *Rasa Kāmadhenu* that if diamond is used without being processed by *śodhana* and *marana* processes it is likely to produce diseases like *pāṇḍu, pārśvapīḍā, dāha/santāpa, kilāsa, kuṣṭha, bhrama, gurutva* and *kṣaya.*

Śodhana :

Śodhana drugs	- *Kulattha* or *kodrava kvātha, hayamūtra, taṇḍuliya drava, vajrakṣīra, vyāghrī kanda, pārada.*
Śodhana process	- 1) *Niṣecana* after strong heating for one hundred times at least. 2) *Svedana* in *dolāyantra* from one *yāma* to seven days. 3) *Puṭapāka* for twentyfour hours. 4) Dipping into mercury after heating.

Māraṇa :

Māraṇa drugs	- Purified *manaḥśilā, haritāla, gandhaka, rasasindura, svarṇamākṣika bhasma.*
Bhāvanā drugs	- *Kulattha kvātha,* three years old *kārpāsa-mula svarasa.*
Puṭapāka	- Heating fourteen times by *puṭa* system through *mahāpuṭa* or *gajapuṭa.*

Note - 1) There are a number of *māraṇa* methods for *vajramarāṇa* but the above mentioned method is simple, easy and common. It is a slight modification of the method mentioned by Soma Senānī in *Rasa Ratna Samuccaya.* The conversion of diamond into ash is really a difficult task.

2) Diamond is the most favourite gem of the planet *(graha)* Śukra and hence may be worn on the body or may be used internally in ash form to please the planet Śukra or to remove its *prakopa* (ill effects).

VAIDŪRYA (CAT'S EYE) $BeAl_2O_4$

Modern description -

Chemically *vaidūrya* is berylium aluminium oxide containing BeO 19.8% and Al_2O_3 80.2% with traces of iron and magnesium. Its crystals are orthorhombic, tubular or heart shaped, lustre is vitreous to greasy, colour is greenish white or greenish yellow, transparent to translucent, exhibits play of colours on exposure to sun rays. Its hardness is 8.5 and sp. gr. is 3.6 - 3.8.

Its mineral, Cymophan is opalescent and has a yellow green colour, silky lustre and fibrous structure. Hence the name cat's eye is given to it. It also resembles garlic *(lehaśuna)* in appearance hence in Hindi it is called *lahaśuniyā.* It contains white shining line in the middle and in ancient taxts this is described as if it contains a white cloth like or white cloud like structure across the middle.

On the basis of its shape and appearance *vaidūrya* may belong to two different groups, *viz.*, 1. chrysoberyl or emerald group, and 2. quartz group.

The green fibrous variey, crocidolite, of quartz group is also known as Cat's Eye. It is an asbestos like substance and contains $FeSiO_3$ having a hardness of 4. It appears to be a secondary mineral.

Varieties of Cats Eye :

On the basis of colour -
1. White,
2. Smoky,
3. Blackish,
4. Mixed coloured.

On the basis of caste -
1. *Brāhmaṇa* - Whitish blue
2. *Kṣatriya* - Whitish red
3. *Vaiśya* - Yellowish blue
4. *Śūdra* - Blue.

Synonyms of Cats Eye :

Vaidūrya, viḍālākṣa, mārjāranetra.

Physical properties of vaidurya :

Superior variety - Vaidūrya of superior variety should be blackish white, clear, even, heavy, greasy, smooth, containing white fibre like structure across the middle surface and should look like cat's eye.

Inferior variety - Vaidūrya which is black, looks like water, rough, flat, light in weight and contain red lines in its middle is considered inferior.

Pharmaco-therapeutic properties :

Rasa	-	*Madhura.*
Guṇa	-	*Śīta, snigdha.*
Vīrya	-	*Śīta.*
Karma	-	*Dīpana, pācana, buddhi/prajñābardhana, āyubardhana, balabardhana, parama-bṛmhaṇa, medhya, netrya, malamocana.*
Doṣa prabhāva	-	*Pittaghna.*
Vyādhi prabhāva	-	*Raktapitta, pittāmaya, netraroga, ketugrahajanya roga.*

Processing of vaidūrya :

Śodhana :

Śodhana drugs	-	*Triphalā kvātha.*
Śodhana process	-	*Svedana* in *dolāyantra* for one *yāma.*

Māraṇa :

Māraṇa drugs	-	*Māṇikya* and *vajra* powder.
Māraṇa process	-	*Vaidūrya* powder mixed with the above powders and heated in *gajapuṭa* fire by *puṭa* system is converted into ashes. The other process may be the same as followed in the case of *māṇikya.*

Note - *Vaidūrya* is the most favourite gem of the planet *(graha)* Ketu and hence may be worn on the body or used internally to please the planet Ketu or to remove its *prakopa* (ill effects).

GOMEDA (CINNAMON STONE/HESSONITE) $CaAl(SiO_2)$

Modern description -

Chemically *gomeda* is calcium aluminium silicate in which calcium may be replaced partially by ferrous iron and aluminium by ferric iron. Its crystals are

cubic, colour is dark brown or rose red, hardness is 6·5 to 7·5 and sp. gr. is 3·5 to 3·7. It is translucent to opaque having vitreous to resinous lustre. Its mineral is grossularite.

Some scholars consider zircon ($ZrSiO_4$) as *gomeda*. Zircon is brown or greyish in colour, transparent to opaque, has tetragonal crystals and adamantine lustre. Its hardness is 7·5 and sp. gr. is 4·65 to 4·71.

According to *Rasendra Cūḍāmaṇi* the colour of *gomeda* should resemble the colour of cow's fat and that is why it is named as *gomeda*, and this means it should be *light red* in colour. *Nighaṇṭu Ratnākara* mentions that it is similar to *gomūtra* (cow's urine) in colour.

Gomeda occurs in South Africa, Ukraine and Arizona. It does not occur in India.

Varieties of gomeda :

Four varieties of *gomeda* based on colour and caste are described in *Rasa Kāmadhenu*. These are :

1. Whitish yellow - *Brāhmaṇa*.
2. Reddish yellow - *Kṣatriya*.
3. Yellow - *Vaiśya*.
4. Blackish yellow - *Śūdra*.

Synonyms of gomeda :

Gomeda, pītaratna, tṛṇajvara, sundara.

Physical properties of gomeda :

Superior variety - *Gomeda* of superior variety should be smooth, clear, shining, heavy, even, without layers, having a colour similar to that of *gomeda* or *gomūtra, i.e.*, light brown.

Inferior variety - *Gomeda*, which is less shining, opaque, rough, flat, with layers, light in weight, dirty, dull, looking like yellow glass is inferior. This is not recommended.

Just like diamond *gomeda* also possesses defects like-*mala, bindu, rekhā, trāsa* and *kākapada*.

Pharmaco-therapeutic properties :

Rasa	-	*Amla*.
Guṇa	-	*Uṣṇa*.
Karma	-	*Dīpana, pācana, rucya, tvacya, atibuddhi-prabodhana, balya, pāpanāśana*.

Doṣa prabhāva - *Kapha pittaghna, vātakapha vikāranut.*

Vyādhi prabhāva - *Pāṇḍu, kṣaya, kaphavāta vikāra, tvak doṣa, aruci.*

Processing of gomeda :

Śodhana :

Śodhana drugs - *Nimburasa.*

Śodhana process - *Svedana* in *dolāyantra* for one *yāma.*

Māraṇa :

Just like that for *māṇikya* or by general method.

Dose - 1/4th to 1 *guñjā.*

Note - *Gomeda* is the most favourite gem for the planet *(graha)* Rāhu and may be used for wearing on the body or internally to please the *graha* Rahu or to remove its *prakopa* (ill effects).

MŪKTA (PEARL) $CaCO_3$

Modern description -

Chemically *pearl* is calcium carbonate but it may also contain some other elements in traces which makes pearl medicinally more effective than other calcium compounds such as *śaṅkha, śukti, varāṭa, pravāla* and marble.

Pearls generally occur in the sea inside a shell known as *Muktā Śukti.* They are obtained from Australian, Iranian and Indian oceans. Of the various pearls, Basarai pearls are considered the best. In India, natural pearls are obtained from the sea near Kathiawar and Rameshwaram from the shallow sea water.

According to ancient belief, *muktā* is obtained from the following sources, *viz., megha, varāha, śaṅkha, śukti, gaja, matsya, śarpa* and *bamśa.* Of these, *śukti* is the most common source of *muktā* and muktā from *śukti* is considered the best for medicinal uses.

In addition to these natural sources pearls now-a-days are produced artificially by culture method. These pearls are in no way inferior to the natural ones.

Formation of pearls in śukti :

Pearls are formed in the *Muktā Śuktis.* Actually these are formed by a secretion of a worm living inside the *Muktā Śukti.* It is secreted from the outer portion of the skin of the worm and is very shining. And because of this the

inner surface of the *Muktā Śukti* looks very bright and shining. It is a continuous process and the secretion goes on sticking on the inner surface of the *Śukti* but sometimes if a sand particle enters into the *Śukti*, the secretion starts adhering around the particle and in due course, when many layers of secretion adheres on the particle, a pearl is formed. The size of pearl depends upon the number of layers of the secretion which adheres on the granule or on the particle. These layers consist of two types of secretions. The first type of secretion is calcium carbonate while the second type is *Kanchi Maline*. These layers are like those of onion. Thus when light rays fall on pearls some rays get reflected from the outer layers while the others enter to still deeper layers and get reflected from there. This produces a play of light rays which looks most beautiful to the viewer and makes the pearl most shining and bright. But sometimes an opaque substance comes in between the layers during pearl formation and this makes the pearl uneven, opaque and defective. This is the natural process of pearl formation but in this process one has to depend on nature for the entrance of the sand particle in the *Muktā Śukti* containing the worm. Hence natural pearls are rare. To overcome this, scientists have developed a culture method for pearl production. In this process a small granule is put inside the *Muktā Śukti* containing the worm and the shells are closed. The *Śukti* is then put in the sea water to allow the worm to secrete and the secretion to adhere on the granule,thus facilitatingthe formation of good pearl in due course. By this process a good variety of pearl is formed in a comparatively shorter period. There is not much difference between natural and cultured pearls as both are formed under the same conditions and with the same materials.

Varieties of pearls :

According to method of preparation :

Prākṛta	-	1. Natural
		2. Cultured
Kṛtrima	-	Artificial

According to origin :

Eight types. (1) *meghaja*, (2) *śaṅkhaja*, (3) *baṃśaja*, (4) *varāhaja*, (5) *hastija*, (6) *mīnaja*, (7) *phaṇija* and (8) *śuktija*.

Synonyms of pearl :

Muktā, muktāphala, śauktikeya, śaśipriya, candraratna, jivaratna, sindhuja.

Physical properties of pearls :

Superior variety - The pearls which are like a star or rays, smooth, clear,

round, light, big in size, pleasing, and looking like clear water are superior. Some scholars are of the view that heavy pearls are the best.

Inferior variety - The pearls which are rough, blackish or reddish in colour, half white, look like salt, lustreless, uneven, dirty, opaque, contain nodules and look like a *kṣāra* (alkali) are inferior.

Defects of pearls :

The pearls are said to contain four *mahādoṣas* (great blemishes) and six *samānyadoṣas* (minor blemishes). Their names and effects are as follows :

1. *Śukti khaṇḍa*	-	*Kaṣṭakara.*
2. *Matsyākṣa*	-	*Putra nāśakara.*
3. *Jaṭhara*	-	*Mṛtyukara.*
4. *Vidrumacchāya*	-	*Dāridryakara.*
5. *Trivṛtta*	-	*Saubhāgya nāśaka.*
6. *Cipiṭa*	-	*Akīrtikara.*
7. *Kṛśa*	-	*Prajñā vidhvaṃśakara.*
8. *Trikoṇa*	-	*Saubhāgya kṣayakara.*
9. *Kṛśa pārśva*	-	*Nirudyogakara.*
10. *Avṛtta*	-	*Sarva sampattināśaka.*

According to *Rasa Paddhati* pearls are supposed to have three types of lustres :

1. *Madhucchāya*	-	like honey.
2. *Sitacchāya*	-	like sugar.
3. *Srikhandacchaya*	-	like *śrīkhaṇḍa* (a preparation made of curd and sugar)

Srīkhaṇḍacchāya pearls or pearls having the lustre similar to that of *śrīkhaṇḍa* are considered of superior quality.

Test of good quality pearls :

Pearls should be rubbed with the husk of *śāli* (rice) and then washed with salted cow's urine. If no change is observed, the pearls are considered of good quality. Pearls lose their lustre if treated with sulphuric acid.

Mythological origin :

A) Mythologically pearls are supposed to have originated from the broken parts of teeth of the demon Bala.

B) It is believed that if a drop of rain water falls inside a *śukti* floating in the sea-water in Svāti *nakṣatra*, the drop turns into pearl of good quality. It is further stated that if this happens in *rukmaṇī* variety of *śukti* the pearl would be still better in quality. Only such pearls are considered the most auspicious.

Pharmaco-therapeutic properties :

Rasa	-	*Madhura.*
Guṇa	-	*Suśita, laghu, snigdha.*
Vīrya	-	*Śīta.*
Karma	-	*Bṛṃhaṇa, vṛṣya, balya, āyuṣya, medhya, vīryaprada, tuṣṭikara, puṣṭikara, cakṣusya, dīpana, kāntiprada, viṣāpaha, dāha śāmana, asthidanta vivardhana.*
Doṣa prabhāva	-	*Pittahara, kaphapittahara.*
Vyādhi prabhāva	-	*Rājyakṣmā, kṣata, kṣaya, kāsa, śvāsa, vīryakṣaya, dāha, dantodbhedaja jvara, santāpa, agnimāndya, prameha, dṛṣṭiroga, unmāda, vātavyādhi,* diseases caused by *candragraha prakopa, (galaganḍa, ganḍamālā, ślīpada, jalodara, śvāsa, kāsa, hrdroga, śula, chardi, kṣaya, jvara.)*

Processing :

Śodhana :

Śodhana drugs	-	*Jayantīpatra rasa, agastya patra rasa, nimbu rasa, uṣṇodaka.*
Śodhana process	-	*Svedana* in *dolāyantra* for one *yāma, prakṣālana* with *uṣṇodaka.*

Māraṇa :

Māraṇa process	-	Grinding with *kumāri rasa, godugdha* and *arka gulāb* and heating three times in *laghuputa.*
Bhasma colour	-	White like moon.

Piṣṭi nirmāna :

For preparing *piṣṭi*, powdered pearls are ground with rose water, *arka kevarā, arkaveda* musk, *etc.* for twentyone days or till they become very fine like collyrium. The *piṣṭi* so obtained is a light pink powder.

Dose - 1/4th to 1 *guñjā* in suitable vehicle.

Note - Pearl is the most favourite gem of the planet Moon *(Candragraha)* and hence may be used for wearing on the body or internally to please the planet, Moon or to cure the diseases caused by its *prakopa* (ill effects).

PRAVĀLA (CORAL) $CaCO_3$

Modern description -

Chemically coral also is calcium carbonate but contains other elements in traces which makes it different from other calcium carbonate group of compounds and therapeutically more effective.

Corals generally occur in shallow sea water but red or rosy corals are obtained from a depth of at least 50 feet. Corals are originated from the sea animal *Anthozoan polyps.* These animals drink sea water for their survival, and calcium in the sea water is absorbed and get deposited in various parts of their body. After some time when the quantity of deposited calcium in the body becomes excessive the animals die and the dead body is known as *pravāla* or coral. These animals are found in different shape, have many feet and ring like structures. A special type of water and a particular temperature is required for their growth and hence these are found only in some particular places. Such places are in Mediterranean Sea between Europe and Africa, south of Burma, and north of Australia. In these places the coral reefs spread over hundreds of miles and still the animals continue to grow in the sea water.

In Āyurvedic literature also, corals are said to be obtainable from the sea and are described as creeper *(latā).*

Varieties :

On the basis of colour there are four varieties of coral *viz.*, white, grey, black, and red or rosy. Of these only the red or rosy corals are considered the best and recommended for *rasakarma, rasāyanakarma, dāna, dhāraṇa, etc.* These are found in Mediterranean Sea near Italy.

On the basis of caste *pravāla* is described to be of four types :

1. *Brāhmaṇa* - red like rabbit blood and smooth.
2. *Kṣatriya* - red like *japāpuṣpa* and rough.
3. *Vaiśya* - red like *palāśapuṣpa* and less shining.
4. *Śūdra* - red like lotus and without shine and lustre.

Synonyms :

Vidruma, abdhilatā, latāmaṇi, raktakanda, bhaumaratna.

Physical properties :

Superior variety - Coral which is red like ripe *bimbīphala*, long, round, even, smooth, thick, without holes and fissures is of superior variety.

Inferior variety - A coral which is whitish or grey coloured, rough, light, thin, and contains holes and fissures is of inferior variety.

Pharmaco-therapeutic properties :

Rasa	-	*Kaṣāya, madhura,* and *amla.*
Guṇa	-	*Laghu, snigdha, śīta.*
Vīrya	-	*Śīta.*
Karma	-	*Dīpana, pācana, balya, puṣṭikara, kāntikara, vīryavṛddhikara, cakṣuṣya, maṅgalya, bhūtādi śamana, graha doṣahara.*
Doṣa prabhāva	-	*Pittahara, kaphapittanut, tridoṣaghna.*
Vyādhi prabhāva	-	*Rājayakṣma, kṣaya, kṣata, kāsa, śvāsa, raktapitta, dṛṣṭiroga, raktaroga, bhūtonmāda* and the diseases caused by the wrath of *maṅgalagraha, viz., raktaduṣṭi, raktapitta, dadru, visphoṭa, bhagandara, duṣṭa vraṇa, prameha, asthi bhaṅga, raktasrāva, raktātisāra,* and *viṣa.*

Processing :

Śodhana :

Śodhana drugs	-	*Jayantīpatra rasa, taṇḍulīya rasa, kṣāra drava.*
Śodhana process	-	*Svedana* in *dolāyantra* for one *yāma.*

Māraṇa :

Māraṇa drugs	-	Nothing specific.
Bhāvanā drugs	-	*Kumarīsvarasa, godugdha, satāvarī rasa, jayantī rasa.*
Māraṇa process	-	Heating by *puṭa* system applying two to three *gajapuṭas.*
Colour of *bhasma*	-	White.
Piṣṭi nirmāna	-	Purified coral powder should be ground with rose water or *kevarā* water till it becomes fine like collyrium.
Dose	-	1-2 *guñjā* with honey.

Note - Coral is the most favourite gem of the planet *(graha)* Maṅgala and may be used for wearing on the body or internally to please Maṅgala graha or to destroy its ill effects.

UPARATNAS (SEMI-PRECIOUS STONES)

Some *Uparatnas* (semi-precious stones) are also recognised for their medicinal values. The stones which are less hard, less shining, less transparent, and less costly are included in this group. The following substances of this group are found described in *Rasa Ratna Samuccaya.*

Vaikrānta	-	Tourmaline
Sūryakānta	-	Sun stone
Candrakānta	-	Moon stone
Rājāvarta	-	Lapis lazuli
and *Sphaṭika*	-	Quartz.

VAIKRĀNTA (TOURMALINE)

Much details about *vaikrānta,* except its *druti* processes, are not available in this chapter of *Rasa Ratna Samuccaya.* But according to the description in other *Rasa* texts, it appears that *vaikrānta* has been included in two groups, *i.e.,* in *mahārasa* group and in *maṇi* group in general, and in *uparatna* group in particular. It is also said about *vaikrānta* that vaikrānta could be used in the place of *vajra* (diamond), as it is almost similar to *vajra* in characteristics and properties. Some *rasa* texts call it *paṅka vajra* or *dagdha hīraka* which also suggests that it is very close to diamond in quality and properties. On this basis some scholars consider it as Irish diamond. The other details regarding *vaikrānta* have been described in the second chapter of *Rasa Ratna Samuccaya.*

SŪRYAKĀNTA (SUN STONE) $Na_2Al_2O_3 6SiO_2$ or $CaOAl_2O_3 2SiO_2$

Modern description -

Chemically sun stone is a combination of sodium, aluminium, silicon, oxygen, and calcium. It is a variety of *Adularia.* Its mineral is called Avanturine oligoclase which is somewhat red in colour with bright yellow or red reflections from the ingrained thin scales of hematite. Its crystals are triclinic, hardness is 5.5 to 6, sp. gr. is 2.65. It is translucent, exhibiting reddish flashes owing to the admixture of mica or other thin plate-like minerals.

It is mentioned in ancient texts that owing to its reddish colour *sūryakānta* looks like burning charcoal when the sunrays fall on its surface. It is further said that when the sunrays accumulate on its particular part it becomes very

hot and burns a thin piece of cotton or paper if this is brought near this part of the gem.

Sun stone occurs in Burma, Russia, Norway and Madagaskar.

Physical properties :

Superior variety - Sun stone of superior variety should be very clear, smooth, round, free from layers and holes, and would look burning when in contact with intense sun-rays.

Inferior variety - Sun stone which does not have the above characteristics is of inferior variety.

Pharmaco-therapeutic properties :

Rasa	-	*x*
Guṇa	-	*Uṣṇa.*
Vīrya	-	*Uṣṇa.*
Karma	-	*Rasāyana, medhya, ravituṣṭikara.*
Doṣa prabhāva	-	*Vāta śleṣmahara.*

Processing :

Māraṇa :

Māraṇa drugs	-	*Suddha manaḥśilā* and *gandhaka.*
Māraṇa process	-	Heating by *puṭa* system using seven *gajapuṭas.*

Note - Sun stone is the favourite gem of the *graha* Surya and may be used for wearing on the body or internally for therapeutic purposes to please the planet.

CANDRAKĀNTA (MOON STONE) $NaAlSi_3O_8$ or $KAlSi_3O_8$

Modern description -

Chemically Moon stone is a combination of sodium, aluminium, silicon and oxygen but sometimes it may contain potassium or calcium in place of sodium. It is a variety of Adularia and occurs usually in white or colourless crystals which are usually transparent or slightly cloudy and possess excellent opalescence. Its lustre is vitreous to pearl like. It comes under orthoclase group. Its crystals are monoclinic. A variety of Albite (Soda feldspar) showing bluish opalescence is also called Moon stone. Its crystals are triclinic, usually small and found in twins. These are colourless or grey. Its colour is bluish white but sometimes it may have many colours. In Moon rays it looks very

beautiful, pleasing and very cold and shines like water. In ancient texts it is said about it that if kept in moon rays it starts a secretion. But this is not correct, it only gives such impression.

Moon stone occurs in Sri Lanka, Burma and Madagaskar.

Physical properties :

Superior variety - Moon stone which is smooth, yellowish from all sides, cold to touch, clear, free from *trāsa doṣa*, gives an impression of secretion in the moon light is of superior variety.

Inferior variety - Moon stone not possessing the above characteristics is inferior.

Pharmaco-therapeutic properties :

Rasa	-	x
Guṇa	-	*Śīta.*
Vīrya	-	*Śīta*
Karma	-	*Asranut, tāpanut, grahālakṣmīvināśana, śivaprītikara.*
Doṣa prabhāva	-	*Pittanut.*
Vyādhi prabhāva	-	*Raktavikāra, pittavikāra, dāha, santāpa, raktapitta.*

Processing :

Māraṇa :

May be done by the method used for Sun stone.

Note - Moon stone is the favourite gem of the planet Moon *(Candragraha)* and may be used for wearing or internally to please the planet moon.

RĀJĀVARTA (LAPIS LAZULI) $Na_4(NaS_3A1)A1_2Si0_4$

Modern description -

Chemically rājāvarta is a combination of sodium, sulphur, aluminium, silicon and oxygen. It is known as a sulphur containing silicate complex. It is also known as ultramarine which is bright blue in colour. Its crystals are cubical, fracture uneven, lustre is vitreous to greasy, appearance is opaque to translucent, hardness is about 5.5, sp. gr. is 2.4 to 2.8. It is a contact mineral and occurs in crystalline lime stone.

Lapis lazuli occurs mostly in Persia, Turkistan, Afghanistan, Russia and India (near Ajmer). It is also made artificially in Germany.

Varieties :

According to form	-	*Guṭikā svarupa,* *Cūrṇa svarupa.*
According to colour	-	*Rakta* (red), *Nīla* (blue), *Miśrita* (mixed colour)
According to source	-	Natural, Artificial.

Physical properties :

Superior variety - Lapis lazuli which is blue with reddish tinge, heavy, smooth or oily, very clear, bright, sky coloured or of colour similar to peacock's neck or black is superior.

Inferior variety - Lapis lazuli which does not possess the above characteristics is inferior.

Pharmaco-therapeutic properties :

Rasa	-	*Kaṭu, Tikta.*
Guṇa	-	*Snigdha, śita.*
Vīrya	-	*Śīta.*
Karma	-	*Dīpana, pācana, vṛṣya, vṛṃhaṇa, rasāyana, viṣāpaha.*
Doṣa Prabhāva	-	*Ślesmahara, anilāpaha, pittanāśana.*
Vyādhi prabhāva	-	*Prameha, kṣaya, pāṇḍu, arśa, chardi, meha, mūrcchā, śoṣa, madātyaya, hikkā, dāha, clama.*

Processing :

Śodhana :

Śodhana drugs	-	*Gomūtra* with *kṣāra, nimburasa, kṣāradrava, amla drava, śirīṣa puṣpa rasa, mahiṣī kṣīra* with *goghṛta, ārdraka rasa.*
Śodhana process	-	1. *Svedana* in *dolāyantra* for one *yāma.* 2. *Pācana* in *lohapātra.* 3. *Bhāvanā* two to three times with some of the above liquids.

Māraṇa :

Māraṇa drugs	-	Purified sulphur, *śukapuccha cūrṇa.*
Bhāvanā drugs	-	*Nimburasa, bhṛṅgarāja rasa.*
Process	-	Heating by *puṭa* system applying seven or eight *gajapuṭas.*

Satvapātana :

Satvapatana drugs	-	*Manahśilā, ghṛta, mahiṣikṣīra, mitrapañcaka.*
Process	-	Mix all well, heat in an iron pan till dry, then add *mitrapañcaka* and prepare round balls. Put these in a *mūṣā* and apply strong heating using *khadirāṅgār.*
Colour of satva	-	Not mentioned.

SPHAṬIKA (QUARTZ/ROCK-CRYSTAL) SiO_2

Modern description -

Chemically it is a combination of silica and oxygen, but sometimes contains other elements in trace which imparts various colours to it. Pure quartz consists of 45.7% Si and 53.3% O. Massive varieties often contain calcium, iron, copper, clay and other impurities. It occurs in distinct crystals which are commonly prismatic, hexagonal or trigonal, its lustre is vitreous to greasy. Pure specimens of quartz are transparent and colourless but most varieties are coloured due to impurities. It occurs abundantly throughout the world. *Akika* (agate) is one of its crystalline varieties.

Synonyms :

Sphaṭikopala, bhāsura, dautopala, śitopala, śālipiṣṭa, amalamaṇi, kācamaṇi, śiva ratna.

Physical properties :

Superior variety - Quartz which is white as *Gaṅgā* water, very bright, without layers, smooth, cool to touch, very clear, not loosing brightness even after rubbing or breaking and looking very beautiful is of superior variety.

Inferior variety - Quartz which does not possess the above characteristics is inferior.

Pharmaco-therapeutic properties :

Rasa	-	*Madhura.*
Guṇa	-	*Atiśīta, snigdha.*
Vīrya	-	*Śīta, samavirya* (neither *śīta* nor *uṣṇa*).

Karma	-	*Hṛdya, netrya, balya.*
Doṣa prabhāva	-	*Pittahara.*
Vyādhi prabhāva	-	*Dāha, raktasrāva, raktapitta, jvara, pittaroga, śoṣa.*

Processing :

Śodhana and *māraṇa* may be done following the method employed for *rājāvarta.*

Note - *Sphaṭika* is the most favourite gem of Lord Śiva. Hence if a garland *(mālā)* made of its round pieces is worn or used for uttering the name of Lord Śiva its effect becomes milion times more for pleasing Lord Śiva.

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