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DIVERSITY OF OLD-CROATIAN NAMES FOR SEAWEEDS AND MARITIME NATURE IN THE ADRIATIC ISLANDS

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By a consistent registering of vernacular names for algae, we have documented 156 marine phytonyms along eastern Adriatic for macroalgae and *Zosteraceae*, including a half of local synonyms between different islands and mainland areas, and 82 names for different marine taxa. Therefore Croatian vernacular names of marine algae are the most numerous within Europe, their richness being subequal to the maximal one for Japanese algae. A minor amount of these marine phytonyms are Romanic loans (1/5 to 1/3), half of them are of Slavonic origin, and the rest are pre-Romance-non-Slavic archaisms of early Liburnian and Proto-Indo-European origin. The poorest stock of algal names occurs in the Dalmatian mainland with 9 Shtokavian phytonyms, and the more abundant Chakavian ones we have registered in the islands: the richest ones in southeastern Krk with 79 marine phytonyms, 25 in Rab, 19 in Dugi Otok, 15 in Vis, 12 in Žirje island, and the poorest are Mljet and Lastovo islands and the Velebit coast with 3–5 marine phytonyms.

Keywords: ethnobotany, phytonyms, algae, Adriatic, seashore, islands, Slavic, Romanic, Liburnian

A. Ž. Lovrić, M. Rac & M. H. Mileković: Raznolikost starohrvatskog nazivlja za alge i za pomorsku prirodu na jadranskim otocima. *Nat. Croat.*, Vol. 11, No. 4., 455–477, 2002, Zagreb.

Sustavnim popisom je kod nas na istočnom Jadranu nadjeno 156 morskih fitonima za makroalge i *Zosteraceae*, od čega su polovica sinonimi izmedju raznih otoka i kopna, a ostalih 82 fitonima se odnose na posebne morske svojte. Zato su kod nas imena morskih alga bogatija negoli igdje u Europi i podjednako brojna kao u najbogatijem svjetskom nazivlju za alge u Japanu. Tek manji dio toga hrvatskog nazivlja za alge su posudjeni romanizmi (1/5–1/3), polovica su čakavski nazivi, a ostalo predromansko-neslavenski arhaizmi liburno-ilirskoga i praindoeuropskog podrijetla. Kod nas je najsiromašniji štokavsko nazivlje alga na kopnenim obalama, najviše do 9 fitonima. Bogatije je čakavsko nazivlje alga na otocima: najviše je 79 morskih fitonima na jugoistočnom Krku, pa 25 na Rabu, 19 na Dugom otoku, 15 na Visu, 12 na Žirju, a najmanje (3–5) velebitska obala, Mljet i Lastovo.

Ključne riječi: etnobotanika, fitonimi, alge, Jadran, obala, otoci, slavenski, romanski, Liburni

INTRODUCTION

There have been very few ethnobotanical studies on vernacular phytonyms in Croatia, and what there have been are not in conformity with international standards. Within southeastern Europe, Croatian vernacular phytonyms are known very little, when compared with extensive recent studies in surrounding countries: e.g. in Slovenia (BARLE, 1937, etc.), in Serbia (SIMONOVIĆ, 1959), and Greece (HELDREICH *et al.*, 1980). The first and almost the only survey of Croatian vernacular phytonyms so far is the very old list by ŠULEK (1879) covering most of the southern Slavs, and among them also Croatian phytonyms. In southwestern Croatia (related to the current paper) Šulek listed some rare Chakavian names of some Mediterranean plants mostly from the mainland coast of the eastern Adriatic, but for the majority of islands up to recently, with few exceptions (Cres and Brač), insular phytonyms were hardly known. After 1965, during our successive field studies of vegetation across Croatia and some adjacent countries, with the collected herbarium specimens (deposited mostly in Herb. ADRZ), we included the vernacular names too, if available in the nearby villages. So far, in 4700 collecting sites, we have registered about 11,000 documented phytonyms mostly from the Kaykavian and Chakavian dialects previously in short supply, and the whole is now being prepared for print in a detailed ethnobotanical survey (Croatian Ethnobotanical Glossary). A preliminary selection of terrestrial phytonyms and zoonyms from Krk island was recently presented by MILEKOVIĆ & LOVRIĆ (1998), from Trogir and Kaštela coast by MILEKOVIĆ *et al.* (1998), and for Kaykavian phytonyms in northwestern Croatia by LOVRIĆ (1997b), LOVRIĆ & RAC (1997).

As the most original advance in Croatian phytonyms, we offer here an exhaustive survey of vernacular names for seaweeds, because they were till now nearly unknown in Croatian ethnobotany, particularly as compared with the extensively studied marine zoonyms of eastern Adriatic (cf. VINJA, 1986). Croatian vernacular names for Adriatic algae so far were mostly neglected, because during Yugoslavia the official presumption prevailed that all Croats are continental Slavs coming from the inland Carpathians, and therefore they cannot have original old names for seaweeds or other marine notions. In fact, around Europe the richest marine phytonyms are known on the Atlantic coastline, and the poorest algal onomastics occur on the shores of eastern Europe (GAVAZZI, 1974): all other Slavs along the shores of Montenegro, Bulgaria, Ukraine, Russia, and Poland mostly do not have specific vernacular phytonyms for marine algae, except for some neologism calques. Due to this analogy, neither botanists nor linguists have registered algal phytonyms in the eastern Adriatic, and this paper is the first consistent and detailed survey of vernacular names for algae along the Croatian coast and Adriatic islands. Prior to this there existed only a preliminary ethnographic survey by GAVAZZI (1974) on the traditional use of the phytobenthos around European coasts, including also 5 marine phytonyms (sea-grasses) from the Dalmatian mainland. Recently LOVRIĆ (1997a) published a detailed botanical survey of 362 marine plants from the Velebit Channel, to which he also provisionally added the local vernacular names of the main frequent algae. This previously marginal subject has turned into the richest store of marine

phytonyms along the European seashores, and this unexpected diversity stimulated us to carry out detailed field studies of algal vernacular names across the eastern Adriatic. We have interviewed many indigenous fishermen and other local older people correlated with the benthos, from Kvarner Gulf to the southernmost Dalmatian islands, and present paper presents the main results of this examination.

METHODS

In our experience, the natural onomastics of the islands is usually the poorest in their main towns, for several reasons. Only few of the citizens work in nature, some are recent immigrants, and also the original Chakavian tongue in the insular capital is badly conserved, with Italian influences in preceding centuries, and recent Yugoslav (Shtokavian) variants in 20th century, both of which partly eliminated the traditional domestic vocabulary. The original natural onomastics of the Adriatic is the richest in the internal hamlets of each island, and for maritime items in the old marginal ports of traditional fisheries. Thus we obtained the richest names for seaweeds, invertebrates, and maritime nature in Baška on Krk island, Lopar on Rab, Božava on Dugi Otok, Komiža on Vis, Brna on Korčula, and along the mainland shores chiefly in the ports of Trogir, Bigova (Trašte) at Tivat, etc.

Previously, the noting of vernacular names of plant taxa i.e. their **phytonyms** had been a marginal activity of botanists and linguists, but in 20th century, detailed scientific studies on vernacular phytonyms became an essential topic of specialists in the new discipline of **ethnobotany**, studying the multiple correlations of field vegetation and of local ethnocultures. Recently consistent international standards and complex methods for these interdisciplinary studies have developed: the knowledge of vernacular phytonyms requires an insight into **local dialects**, and also a botanical documentation of each plant name by the **herbarium specimen** of related taxon, or at least a recognizable photographic record with international Latin names, the exact locality (village) is obligatory, and informant's name is recommendable. Invalid indications are: an approximate notation of field phytonyms i.e. a falsification of them made to conform to the official language, or a pure lingual registration without any biological documentation; as of recent years, both of these have become unacceptable in ethnobotanical scientific standards. After the pioneer lists of ŠULEK (1879), no consistent ethnobotanical study on Croatian vernacular phytonyms was published, and then Croatian vernacular phytonyms and ethnobotany were mostly neglected. During 20th century in Croatian phytonyms an abundant production of **artificial neologisms and translation calques** prevailed, mostly from Latin and German: such innovations are useful in education, but they are not a topic of ethnobotany. This innovative trend in Croatian botany was best elaborated by ŠUGAR (1977).

During Yugoslavia (1918–1990), instead of scientific ethnobotany in botanical nomenclature, up to recently a political approach often prevailed, and onomastic studies outside the official Shtokavian language, especially from any pre-Slavic tongues, were suspect and often precluded. Many dialectal phytonyms (Kaykavian, Chaka-

vian, Ikavian etc.), used by 92% of rural Croats, were often rejected as irregular and not registered because they did not fit in with the ideology of that time. The result is that urban phytonyms in Croatia became very divergent from the most rural phytonyms, except for some common trees and cultivated plants. By such ideological suppression, many valuable archaisms in regional phytonyms, zoonyms and other onomastics were lost forever to regional ethnoculture and world science. Thus the present paper constitutes only a minor fragment of such an interesting and rich onomastics, one that managed to evade these restrictions.

DIVERSITY OF ALGAL VERNACULAR NAMES IN SOME ADRIATIC ISLANDS

In the lists of algal vernacular names the following indications are included. Each taxon starts with the local dialectal phytonym, followed by a general symbol of origin: no symbol = usual Chakavian name of Slavic origin, # = Slavicized name of Romanic origin (from Latin, Italian, or its Venetian dialect), * = non-Romance-pre-Slavic archaisms of proto-historic Illyrian or Proto-Indo-European origin. Note: the dialectal vowel »y« of archaic island tongues (Bodulic Cakavica) in phytonyms is mostly comparable to German ü (ue). An English translation of the plant name meaning is given in parentheses, if available. Then follows its scientific Latin name, and the species name ends by an indication of its local abundance: r = rare, c = frequent, cc = very frequent. Local types of accents are indicated after the usual Chakavian orthography, and the accentuated syllable is also marked in bold characters. For phytotaxonomical details and ecology of the algae and sea-grasses given here, cf. LOVRIĆ (1997a). More detailed analyses of the linguistic and ethnocultural affinities of selected archaic phytonyms and zoonyms (here defined biologically) will be included in a parallel monograph on the relict tongues of the Kvarner islands (YOŠAMYA, 2003).

Marine phytonyms along Dalmatian mainland: 4 to 9 plant names

Along the mainland shores of the eastern Adriatic southwards from the port of Senj the variants of inland Shtokavian tongues mostly predominate, and the related marine phytonyms are rather poor i.e. restricted chiefly to sea-grasses, but for macroalgae the mainland fishers often do not know specific names. In the following mainland phytonyms we have omitted the accents, because they are rather variable, following divergent local idioms along Dalmatian mainland areas. Along the mainland shores of eastern Adriatic, phytobenthos knowledge and related phytonyms are the richest and most specific in central Dalmatia, but southwards and northwards the folk insight into seaweeds decreases, becoming minimal in Istria and on the Montenegrin coast. In the poorest onomastics of Montenegro coast from port Tivat to Ulcinj only the very general term »morske trave« (phytobenthos – all marine plants) is mostly used, but other marine phytonyms similar to those in Dalmatia, here occur only in the relict Chakavian hamlet Bigova at the port of Tivat. A richer knowledge of the phytobenthos occurs in the central Dalmatian main-

land between Zadar and the Neretva estuary, where the intermediate Ikavian tongue is spoken as a transition from the inland Shtokavian to the islander Chakavian dialects, and here we registered 9 marine phytonyms:

kren (specific name) = *Zostera marina* L.
 lažina (group name) = major pheophytes, mostly *Cystoseira spec. plur.*
 morska trave (sea-grasses: group name) = *Zosteraceae* in general
 murava (group name) = *Coleogeton marinus* (L.) Giac.
 resine (group name) = macroalgae in general (both freshwater and marine)
 sedra (calcifying) = calcified thallophytes (seaweeds and freshwater mosses)
 svilača (silky: specific name) = *Cymodocea nodosa* (Uria) Asch.
 svrdlje (borer: specific name) = rhodophyte *Vidalia volubilis* (L.) J. Ag.
 valiga (specific name, from Greek: **halykos**) = *Posidonia oceanica* (L.) Del.

Southwards in Dalmatia, from the Neretva to Boka Kotorska, including Dubrovnik and the adjacent islands of Elafiti and Mljet, the Shtokavian dialect prevails and benthic onomastics is poorer, including 6 marine phytonyms:

haluge (group name) = major pheophytes, including *Sargassum* + *Cystoseira spec. plur.*
 morske trave (sea-grasses: group name) = *Zosteraceae* in general
 okrečina = incrustated-calcified algae, including *Characeae* and *Corallinaceae*
 okrijek (habit name) = filamentose chlorophytes (freshwater and marine)
 porost (specific name) = *Posidonia oceanica* (L.) Del.
 voga (generic name) = *Zostera spec. plur.*

Northwards along the Velebit coast from Senj to Karlobag the inland Shtokavian dialect prevails again, and phytobenthos onomastics is also poor with 4 vague marine phytonyms, but this is strongly contrasting to the nearest islands with the maritime Chakavian dialect (25 marine phytonyms in Rab, 66 named algae in Krk):

aluga (specific name) = *Posidonia oceanica* (L.) Del.
 bračina = major pheophytes, including *Sargassum* + *Cystoseira spec. plur.*
 morska trava (group name) = sea-grasses in general, *Zosteraceae s.lat.*
 mašina (sea-moss: group name) = minor chlorophytes, mostly *Cladophorales*

The internal nearshore islands in Dalmatia e.g. Ugljan, Pašman, Murter, Šolta, Brač, Korčula etc., include rather modest phytobenthos onomastics with less than ten marine phytonyms, mostly similar to above listed ones of Dalmatian mainlands. Among the Adriatic islands the poorest marine onomastics were registered in Lastovo and Mljet with 3 to 5 marine phytonyms; this is 10–20 times poorer than the richest algal names in the Kvarner islands of Rab and Krk. The most diversified and specific marine phytonyms of Adriatic were registered in the islands of Krk, Rab, Dugi Otok, Žirje, and Vis, and they all belong to the Chakavian dialect of the Adriatic islanders.

Marine phytonyms in the Mid-Adriatic islands (mostly the port of Komiza): 15 plant names

Within the central Adriatic, the nearshore islands of Šolta, Brač, Korčula, Mljet, the eastern part of Hvar, and the Pelješac peninsula include poorer onomastics of the phytobenthos comparable to the Dalmatian mainland. Only in the western part of Hvar do more than ten marine phytonyms occur, and the maximum local richness within central Adriatic was registered in the port of Komiza on remote Vis island with 15 marine phytonyms. Local fishermen descend mostly from the medieval indigenes, and their algal names are rather archaic:

- brôk (generic name) = *Cystoseira spec. plur.*
 carjèna galôna (red lichen) = crustose alga *Peyssonellia spec. plur.*
 cornà galôna (black lichen) = coastal lichen *Verrucaria adriatica* Zahl.: c.
 galôna # (habit name) = flat-crustose algae and crustose lichens (in general)
 jasprîn (generic name) = calcified globose algae, *Lithothamnium spec. plur.*
 koridûr # (gallery) = calcified pavement of *Lithophyllum lichenoides* Phil.: c.
 markênta (dark-belt) = supralittoral belt of cyanobacteria, *Chamaesiphoneae*
 morska kîta (marine branch: habit name) = *Halarachnion ligulatum* (Wood.) Kütz.: c.
 povûje (bandage: habit name) = *Laminaria rodriguezii* Bornet: r.
 purîć (specific name) = *Posidonia oceanica* (L.) Del.: c.
 sâdro * (calcified: group name) = crustose calcifying algae, *Melobesiae spec. plur.*
 sadrîna (calcified algae) = calcifying rhodophytes, *Lithophyllum spec. plur.*
 svilinà (silky: generic name) = *Zostera spec. plur.:* r.
 vlasînica (hairy: generic name) = *Enteromorpha spec. plur.:* r (ports).
 zelenà špûgva (green sponge: specific name) = *Codium bursa* (L.) C.Ag.: c.

Marine phytonyms in Žirje island off Šibenik: 12 plant names

The nearshore islands of northern Dalmatia e.g. Ugljan, Pašman, Murter, Zlarin, include rare phytobenthos names mostly similar to the Dalmatian mainland, with less than ten marine phytonyms. Žirje is a remote offshore islet off the port of Šibenik, and within that area it includes a rather rich folk onomastics of the phytobenthos with 12 marine phytonyms. Local indigenes there were mixed with immigrant inlanders from Bosnia (KALE, 1994), who impoverished and deformed the original algal names.

- âlega # (specific name) = sea-grass *Posidonia oceanica* (L.) Del.: cc
 brâk (habit name) = phaeophyte *Sargassum spec. plur.*
 kiće o'môra (sea-branches: habit name) = ramified macroalgae, mostly *Florideae*
 lasârka (hairy: group name) = chlorophyte *Enteromorpha spec. plur.*
 lumbrêlice # (mini-umbrellas) = chlorophyte *Acetabularia acetabulum* (L.) Silva: c
 mala âlega # (minor sea-grass: specific name) = *Cymodocea nodosa* (Ucria) Asch.: cc
 mâž (group name) = large phaeophytes, mostly *Cystoseira spec. plur.*
 morska salâta # (sea-salad, generic name) = chlorophyte *Ulva spec. plur.*
 rêsa (specific name) = sea-grass *Zostera marina s. lat.*

spugūn # (spongiöse: specific name) = chlorophyte *Codium bursa* (L.) C.Ag.: c
 svrdlūn (borer: specific name) = rhodophyte *Vidalia volubilis* (L.) J.Ag.: c
 travã o'môra (sea-grass) = sea-grasses in general, *Zosteraceae* s.lat.

Marine phytonyms in Dugi island (mostly from the port of Božava): **19 plant names**

In the offshore island Dugi Otok off the port of Zadar, we registered more diversified algal names with a maximum in the port of Božava including 19 marine phytonyms. Local medieval indigenes, in recent centuries, were mixed with Italian immigrants, who added some Romanic forms to marine phytonyms.

âliga # (specific name) = *Posidonia oceanica* (L.) Del. c.
 brāk (generic name) = *Sargassum spec. plur.*
 bũšić (minor bush: habit name) = *Zosterella noltii* (Horn.) Giac.: r.
 crna miĉina (black lichen) = maritime lichen *Verrucaria adriatica* Zahl.: cc (cliffs).
 ĉrljēna miĉina (red lichen) = crustose rhodophyte *Peyssonellia spec. plur.*
 gorūmbul # (generic name) = calcified globose algae, *Lithothamnium spec. plur.*
 klobũĉić (mini-hat: specific name) = *Acetabularia acetabulum* (L.) Silva: cc.
 lancunĉići # (mini-sheets: specific name) = *Ulva spec. plur.*
 mahãlica (minute fan: habit name) = *Padina pavonica* (L.) Thivy: cc.
 mala âliga # (minor sea-grass: specific) = *Cymodocea nodosa* (Ucria) Asch.: cc.
 morska gljĭva (sea-mushroom) = *Codium bursa* (L.) C.Ag.: cc.
 morske piĉūrbe (sea-fungi) = *Valonia spec. plur.*
 morski bũs (sea-bush: habit name) = *Zostera spec. plur.: r.*
 pĭrije # (specific name) = *Flabellia petiolata* (Turra) Gepp.: c.
 rêsa (group name) = ramified macroalgae e.g. *Dictyota*, *Laurencia* etc.
 sãdra * (calcifying: habit name) = calcified rhodophytes, *Lithophyllum spec. plur.*
 stãjci (generic name) = *Cystoseira spec. plur.*
 šišãĉ (specific name) = *Vidalia volubilis* (L.) J. Ag.: c.
 vlasãrka (hairy: habit name) = *Enteromorpha spec. plur.*

Marine phytonyms in Rab island (mostly the port of Lopãr): **25 plant names**

The Kvarner archipelago in the northeastern Adriatic has another distribution pattern of algal names diversity than in Dalmatia. The poorest onomastics with fewer than ten marine phytonyms occurs in the western islands of Cres, Lošinj, Unije, and Silba, but a great diversity of algal names occurs in the inner islands of Krk and Rab. On Rab we registered 25 marine phytonyms, mostly in the port of Lopar. Local fishers descend mostly from medieval or earlier indigenes; the result is rather archaic marine phytonyms:

brãĉić (specific name) = Adriatic endemic pheophyte, *Fucus virsoides* J. Ag.: r.
 cvilĭna (silky: generic name) = *Enteromorpha spec. plur.*
 ĉrĭvca (mini-bowels: specific) = *Nemalion helminthoides* (Well.) Bat.: c (in spring).

črna mazôj (black lichen) = maritime lichen *Verrucaria adriatica* Zahl.: cc (cliffs).
 čarjēna mazôj (red lichen: generic) = crustose rhodophyte *Peyssonellia spec. plur.*
 fuzići (minute-slimy) = epilithic cyanobacteria in supralittoral, *Hormogoneae*
 fuzina (slimy alga: generic name) = *Halymenia spec. plur.*
 jalīga (specific name, from Greek: **halykos**) = *Posidonia oceanica* (L.) Del.: c.
 kogulīći * (generic name) = globose calcified rhodophytes, *Lithothamnium spec. plur.*
 kojāta (yoghurt) = algal slime of rhodophytes, *agar-agar*
 kurdeļice # (ribbon-algae) = flat-elongate seaweeds: *Dictyotales & Rhodymeniales*
 lumbrēlice # (mini-umbrellas) = chlorophyte *Acetabularia acetabulum* (L.) Silva: cc
 mala jalīga (minor sea-grass, specific name) = *Cymodocea nodosa* (Ucria) Asch.: cc
 māsi * (archaic generic name) = *Sargassum spec. plur.*
 mazôj (habit name) = flat-crustose algae and crustose lichens (in general)
 morska balōta # (sea-ball: specific) = globose alga, *Codium bursa* (L.) C.Ag.: c.
 morska travā (sea-grass: generic name) = *Zostera spec. plur.*
 morski māh (sea-moss: group name) = minor bushy chlorophytes, *Cladophorales s. lat.*
 mrkīne (darkish) = endolithic cyanobacteria in supralittoral belt, *Chamaesiphoneae*
 okrēći (group name) = halophytic Charales: *Lamprothamnion + Tolypella spec. plur.*
 rogići (mini-horns: generic name) = calcified-dichotomic *Amphiroa spec. plur.*
 sadrīne * (calcified: group name) = crustose calcifying algae, *Melobesiae s. lat.*
 šculāc (generic name) = *Salicornia spec. plur.*

Marine phytonyms in Krk island (mostly port Baška): 79 plant names

An evident maximum diversity of algal names was registered in the northernmost island Krk, but their distribution across that largest Adriatic island is very unequal: the poorest marine phytonyms (12–15) occur on the western coast of Krk at the port of Malinska and Njivice, but an enormous richness of as many as 79 marine phytonyms was registered in the southeastern part of Krk, mostly at the port of Baška including 66 names of macroalgae and also 13 other marine phytonyms for sea-grasses, shore lichens and cyanophytes. Local fishermen mostly descend from medieval or earlier indigenes; the result is a collection of very archaic marine phytonyms, and the richest amount of marine phytonyms within Europe. Many of these algal names are archaisms from the relict islander tongue *Gana-Veyānna* of pre-Romance-non-Slavic origin, and these archaic phytonyms are written in the orthography used by the last monograph of that early tongue (YOŠAMYA, 2003).

a. Vernacular names of seaweeds in southeastern Krk (66 named macroalgae)

bracyña (specific name) = Adriatic endemic pheophyte, *Fucus virsoides* J. Ag.: r.
 huzýnna * (big-slimy: archaic generic name) = slimy rhodophyte *Halymenia spec. plur.*
 karnacōli # (mini-horns: generic name) = calcified-dichotomic *Amphiroa spec. plur.*
 kogulýtje * (petrified) = globose calcified rhodophytes, *Lithothamnium spec. plur.*
 klobucýtje (mini-hats: specific name) = *Acetabularia acetabulum* (L.) Silva: cc
 khoyātta * (yoghurt) = slime on some rhodophytes, *agar-agar*
kreć- = main radical in algal names of Kvarner islands (*-phyceae*, Japanese: **-nori**)

- krečȳni (big-algae: group name) = collective name of major seaweeds, *macroalgae*
 krečāci (habit-name) = flat-dichotomic algae: *Dictyotaceae*, *Rhodymeniaceae* etc.
 kry-vakamȳku (blood-on-stone: specific) = *Hildenbrandia rubra* (Sommer.) Meneg.: r
 lancunȳtje # (mini-sheets: generic name) = *Ulva spec. plur.*
 marka-krečāc (dark-mini-alga: specific) = *Dictyota spec. plur.*
 markamāh (dark-moss: specific) = *Cladostephus verticillatus* (Light.) Lyngb.: cc
 marka-prahāla * (dark-ribbons: generic) = *Cutleria multifida* (Smith) Grev.: c
 markekrēci * (dark-algae: group name) = pheophytes in general, *Phaeophyta*
 māsje (branches: generic name) = pheophytes *Cystoseira spec. plur.*
 masȳnna * (big-branch: group name) = large pheophyte *Sargassum spec. plur.*
 māzi * (archaic generic name) = spongiöse chlorophytes, mostly *Codium spec. plur.*
 mičakrēc (mini-alga: group name) = minor chlorophytes, *Cladophorales*
 mičamāh (mini-moss: specific) = dwarf rhodophyte *Catenella repens* (With.) Irv.: cc
 mičamāz * (specific name) = endemic chlorophyte *Codium coralloides* Kütz.: r (caves)
 miča-mihūrica (mini-bubbles: specific) = *Valonia utricularis* (Roth.) C. Ag.: cc
 miča-pokrovāta (mini-cover: generic) = calcified *Goniolithon papillosum* (Zan.) Fosl.: r
 mičasādra * (mini-calcified: group name) = calcified *Spongites notarisii* (Duf.) Athan: c
 mičemāsje (minor branches) = *Cystoseira fimbriata* (Desf.) Bory: cc
 mihūrice (vesicles: generic name) = globose chlorophyte, *Valonia spec. plur.*
 mornagālba (sea-ball: specific name) = globose chlorophyte, *Codium bursa* (L.) C. Ag.: cc
 mornamāh (sea-moss: group name) = minor bushy chlorophytes, *Bryopsis spec. plur.*
 mornanōpal (sea-cactus: specific name) = nodose chlorophyte *Halimeda tuna* Lamour.: c
 morna-pavučȳna (sea-web: group name) = filamentose rhodophytes, *Ceramiaceae*
 morna-papruť (sea-fern: specific name) = *Dictyopteris membranacea* (Stack.) Batt.: r
 mornasmrȳc (sea-juniper: specific name) = *Cystoseira spicata* Erc.: c (rocks).
 morna-vēntula # (sea-fan: habit name) = chlorophyte *Flabellia petiolata* (Turra) Gep.: c
 mornecrȳva (sea-bowels) = chlorophyte *Enteromorpha spec. plur.*
 morne-orīšje (sea-Sedum: generic) = rhodophyte *Botryocladia botryoides* (Wulf.) Feld.: r
 mornepēra (sea-plume: generic name) = pennate rhodophyte, *Gelidium spec. plur.*
 mornezdȳni (sea-Equisetum: specific) = charale *Lamprothamnion papulosum* (Wall.)
 Grov.: r
 pinēlići # (brushes: group name) = *Halopitys incurva* (Huds.) Batt.: c.
 pokrovāte (covers: generic name) = pulvinate calcified rhodophytes, *Lithophyllum*
spec. plur.
 prahāle * (ribbon-algae: habit name) = flat-elongate pheophytes and rhodophytes
 roza-mičȳna (red-lichen) = crustose rhodophytes, *Peyssonellia spec. plur.*
 rozašādra (red-calcified: specific) = crustose *Phymatolithon lenormandii* (Ar.) Adey: c
 rozekrēci (red-algae: group name) = major rhodophytes, *Florideae*
 rozemāsje (specific name) = *Laurencia papillosa* (C.Ag.) Grev.: c.
 roze-prahāle (red-ribbons: group name): flat-elongate rhodophytes, *Rhodymeniaceae*
 rozi-krečāc (mini-red-alga, habit) = *Rhodophyllis divaricata* (Stack.) Pap.: r (caves)
 rozi-lancunīc # (red-sheet: generic name) = rhodophytes *Porphyra spec. plur.*
 rozimāh (red-moss: generic name) = bushy rhodophyte *Corallina spec. plur.*
 seune-krēci (giant-algae) = *Macrocystis*, *Nereocystis* etc. (seamen reports on oceans)

sionkrėc * (big-alga: generic name) = *Laminaria spec. plur.* (seamen reports on oceans)
 swidõrje * (spirals: archaic specific name) = *Vidalia volubilis* (L.) J. Ag.: cc
 šadrÿni * (calcified: archaic group name) = calcifying rhodophytes, *Corallinaceae*
 šadrÿtje * (mini-calcified) = flat crustose rhodophytes, *Melobesiae spec. plur.*
 šwilÿna (silky: specific name) = filamentose *Enteromorpha clathrata* (Roth.) J. Ag.: r
 tjarvãc (mini-bowels: group name) = *Nemalion helminthoides* (Well.) Bat.: c (in spring)
 usinica * (mini-hairy: group name) = *Chaetomorpha linum* (Müll.) Kütz. s. lat.: c
 vakrėci (group name) = *Charales* in general
 vakrėtje (generic name) = halophilic charophytes, *Tolypella spec. plur.*
 velamãz (section name) = chlorophyte *Codium tomentosum* (Huds.) Stack. s. lat.: c
 vela-mihurica (major-bubbles: specific name) = *Valonia macrophysa* Kütz.: c
 velašãdra (big-calcified) = rhodophyte *Crodelia expansa* (Phil.) C. Ag.: c (cliffs)
 vela-pokrovãta (big-cover: specific) = *Lithophyllum lichenoides* Phil.: r (cliffs)
 velekrėci (big algae) = major pheophytes, *Sargassum + Cystoseira spec. plur.*
 velemãse (specific name) = *Cystoseira barbata* (L.) J. Ag.: r (coves and depth)
 vėntulic # (mini-fan: specific name) = flat pheophyte *Padina pavonica* (L.) Thivy: cc
 želėna-micÿna (green-lichen: specific) = crustose *Zanardinia collaris* (C. Ag.) Crou.: c
 želenÿtje (greenish: group name) = green macroalgae, *Siphonales*

b) Other marine phytonyms in SE Krk island

(sea-grasses, lichens, cyanobacteria)

bela-micÿna (white lichen) = supralittoral lichen *Lecanora adriatica* Zahl.: r
 čarna-micÿna (black lichen) = supralittoral lichen *Verrucaria adriatica* Zahl.: cc
 halÿga (specific name, from Greek: **halykos**) = *Posidonia oceanica* (L.) Del.: r
 huzÿtje * (mini-slimy) = epilithic cyanobacteria in supralittoral, *Hormogoneae*
 markÿni (darkish) = endolithic cyanobacteria in supralittoral belt, *Chamaesiphoneae*
 micãlÿga (specific name) = *Cymodocea nodosa* (Ucria) Asch.: c
 micatarvã (minor sea-grass) = *Zosterella hornemanii* Rouy: r
 micÿni-vakamÿku (lichens-on-stone) = epilithic lichens and crustose algae
 micÿni (lichens) = crustose *Lichenes* in general
 mornetarvė (sea-grasses) = *Zosteraceae* in general
 smũcanj (generic name) = *Sarcocornia (Arthrocnemum) spec. plur.*
 velatarvã (major sea-grass) = *Zostera marina* L.: r
 vodũun (water-plant: generic name) = *Coleogeton marinus* (L.) Giac.: r

ARCHAIC VERNACULAR TERMS FOR MARINE FAUNA AND SEASHORE ECOLOGY

For a better interpretation of the distribution patterns of algal phytonyms, we registered in parallel on the same sites also the folk onomastics of fishes, marine invertebrates, and marine habitats. For marine zoonyms of fishes and main invertebrates VINJA (1986) published an exhaustive monograph and after our recent coverage, his abundant lists are almost satisfactory for Istria and for most Dalmatian

islands. However in the Kvarner Archipelago the published data are rather deficient, probably because they originate mostly from the largest main port in each island, and these do not have the richest local zoonyms, thus omitting in Kvarner the richest and most archaic zoobenthos onomastics from Lopar and Baška. Therefore we have added here only the omitted marine zoonyms from Kvarner for invertebrates without known vernacular names, and some archaic folk ichthyonyms (fish names) that are very divergent from other Dalmatian islands and mainland areas. Other widespread Adriatic zoonyms similar to those in Istria and Dalmatia are not repeated here.

Archaic fish names in the *Gâna-Veyàna* tongue of southeastern Krk

bječva (barrel: specific name) = *Mola mola* (L.) = *Orthogoriscus*: r (Lopar: bacvã)
 grubotÿna (generic name) = *Lophius piscatorius* L.: c
 grunamãt (Conger's mother: specific) = *Onos mediterraneus* L.: c (Dugi: gruzja-mãt)
 jadvũun * (vulnerable: archaic generic name) = *Trachinus spec. plur.*
 kosirÿka * (mower: archaic generic name) = *Exocetus spec. plur.* (Lopar: kosirica)
 macãan * (sword: specific name) = *Xiphias gladius* L.: r (Vis & Dugi: pešespãda #)
 matãan (specific name) = *Trygon pastinaca* Cuv.; c
 miãaglavòc (mini-Gobius: specific) = endemic *Spelaeogobius trigloides* Z.J.: r
 miãanÿla * (mini-net: pre-Romanic archaism) = minor fishing net (poponica)
 miãavÿra (mini-naive: specific name) = endemic *Salaria zvonimiri* (Kolomb.): c
 nÿla * (pre-Romanic archaism) = fishing net
 nÿlòva * (pre-Romanic archaism) = fishing, fishery
 nÿlòvac * = best fishing site, fishing-post
 oÿtje * (yokes: archaic specific name) = *Sphyrna zygaena* L.: r (Lopar: oÿć)
 peštakãn (sea-rat: generic name) = *Callionymus spec.*
 svidorÿë * (mini-borer: archaic habit name) = *Syngnathus spec. plur.*
 šelebãj * (sea-fox: archaic specific name) = *Alopias vulpes* Gm.: r
 šlipavÿra (simple-minded: generic name) = *Blennius spec. plur.*
 šubãan * (prefect: archaic specific name) = *Coris julis* (L.): cc
 švitÿurka (scintillant) = cavernal fish *Grammonus ater* Risso (*Oligopus*): r
 tÿarnãc (blackfish) = *Chromis chromis* L.: c (Vrbnik: černãc)
 velanÿla * (big-net) = large fishing net (mreža stajačica)

Additional names of marine invertebrates in southeastern Krk (and Lopar)

biša-vakamÿku (stone-borer: specific) = *Gastrochaena dubia* (Pennant): c (cliffs)
 čarvÿ-vakamÿku (worm-in-stone: generic) = *Physcosoma granulatum* (Leuch.): c (cliffs)
 čavjenna (red-shell: habit name) = *Callista chione* (L.): c (Vrbnik: čevjenska)
 grubatãgna (coarse limpet: specific name) = *Patella athletica* (Bean): cc
 jaštròg (specific name) = crayfish *Palinurus elephas* Fab.: c (rocky bottoms)
 kangaròli # (group name) = marine snails *Muricidae*
 kangaròlica (she-Murex: specific name) = *Murex trunculus* L.: cc

- kangaroljč (mini-Murex: specific) = *Tritonalia erinacea* (L.) c
 kangaruol (he-Murex: specific name) = *Murex brandaris* L.: c
 karnac # (horned: habit name) = *Aporrhais pespelecani* (L.): r (deeper bottom)
 kogulyna * (archaic specific name) = *Cladocora caespitosa* (L.): c (rocky bottom)
 koltrinica # (mini-lace: generic name) = bryozoan *Retepora spec.*
 krišvaal (group name) = starfishes, *Asteroidea* (Lopar: križevalj)
 kubott * (archaic specific name) = cephalopode *Octopus macropus* Risso: r
 lumbarytje (specific name) = snail *Columbella rustica* (L.): c (Lopar: lumbarič)
 macynna (generic name) = *Sepia officinalis* L.: cc (mačynaj = *Cephalopoda* in general)
 malamića (dwarf: habit name) = crustacean *Pisidia (Porcellana) spec.*
 melnajš (sand-urchin: specific name) = *Psammechinus microtuberculatus* (Blain.): r
 melnyca (sand-shell: habitat name) = *Ventricoloides nux* (Gmel.): c (Lopar: mēlnica)
 mićakoraj (mini-coral: habit name) = ramified Bryozoans, mostly *Porella & Myriapora*
 mićakrišac (mini-starfish: specific name) = *Astropecten spinulosus* : c
 mićamacić (mini-cuttle: generic name) = *Sepiola (Sepietta) spec. plur.*
 mićamüsjul # (mini-mussel: specific) = *Mytilaster minimus* (Poli): cc (rocky shore)
 mićastrýga (mini-oyster: generic name) = *Chama spec. plur.*
 mićatagna * (mini-limpet: specific name) = *Trimusculus garnoti* (Payr.): r
 mićapušýć (mini-snail: habit name) = *Littorina neritoides* (L.): cc (Lopar: mići-pužić)
 morna-krelüt * (sea-wing: specific name) = *Pteria hirundo* (L.): r
 mornakûr * (sea-cone: habit name) = *Conus spec. plur.*
 mornejaje (sea-egg: specific) = endemic *Sarcobotrylloides superbus* Drasch: c (caves)
 mornetubi # (sea-tubule: habit name) = *Vermetidae* (Lopar: morski tûbi)
 papavuk (habit name) = crabe *Inachus spec. plur.* (Dugi: morski pãuk)
 pisipaje # (group name) = *Placophora (Chiton spec. plur.)*
 rozimýh (red-bladder: specific) = *Halocynthia papillosa* L.: c (Vrbnik: čevjen-mîh)
 rudāan * (generic name) = freshwater crayfish, *Astacus pallipes*: r (Velarika brook at Baška)
 sioncãrv (giant-worm: generic name) = big polychete *Dasybrochus spec.*
 sionkrišac (giant starfish: specific name) = *Luida ciliaris* Philippi: r (at Prvić islet)
 šamãn-koraj * (violet-coral: specific) = *Muricea chamaeleon* Koch: r (at Prvić islet)
 šenac (group name) = mollusks *Scaphopoda*
 škakavac (sea-hopper: group name) = *Gammaridea* (Lopar: skãkavac)
 šmardela (stinker: specific) = sponge *Verongia aerophoba* (Schmidt): cc (Lopar: smrdelja)
 tagni * (archaic generic name) = limpets, *Patella spec. plur.*
 tumbãan (specific name) = snail *Astraea rugosa* L.: c
 uligyna * (big-squid: specific) = cephalopode *Ommastrephes sagittatus* (Lam.): r
 usynna * (big-wig: specific) = actinian *Anemonia sulcata* (Pennant): c (shelters)
 velatagna (big-limpet: specific) = relict *Mihovilia adriatica* Yoshamya (Valencienniidae): rr

Onomastics of marine habitats and seashore ecology in Kvarner (mostly SE Krk)

The Shtokavian onomastics of seashore habitats along the eastern Adriatic mainland is as poor as it is for algae and it was mostly listed and described by RUBIĆ (1937), but it is more diversified in the Chakavian islands. We do not repeat the rich vernacular names of marine habitats and seashore phenomena registered in Vis island, which have been mostly published and well described within the fishery glossaries of BOŽANIĆ (1983, 1996) and VIDOVIĆ (1984), and for Žirje island, cf. KALE (1994). The most interesting archaic onomastics for marine habitats and for ecological phenomena of seashores were registered in the Kvarner islands Krk and Rab, especially in the archaic Veyan tongue, mostly different from that of other Adriatic islands and not reported previously. The abrupt southeastern part of Krk island is covered by extreme dissected karst relief, and its seashores from Vrbnik port to Stara Baška hamlet are mostly a series of subvertical sea-cliffs up to 470 m high and 17 km long, the largest in the Adriatic. These cliffy shores include many sea-caves, 30 coastal ravines, canyon bays, and in the closest Velebit coast numerous submarine springs, cavernous estuaries of subterranean rivers, etc occur. All these habitats of coastal karst have detailed names in the local archaic tongue. Baška and Lopar are very exposed to the strongest and most frequent bora storms from the direction of the port of Senj, and therefore in the local tongues diversified names for storm types and hurricanes occur, their effects, stormy roaring, wave forms and other related phenomena, that are mostlyonyms or lacking elsewhere in the Adriatic (all first names not located are from SE Krk).

- artÿna (Vis & Hvar: velirôt) = peninsula (large promontory)
 aštënn * (Vis & Hvar: kãmik) = offshore sea-cliff (abrupt islet)
 badànj = submarine cliff (seafloor escarpment)
 barsÿna * (Vrbnik: beršîna) = coastal ice (frozen seashore)
 barsadÿn * = floating ice (ice in sea)
 bujmerÿna * = estuarine cave of subterranean river
 buÿmmer * (Vrbnik: bûjmer, Vis & Brač: slâtina) = subsaline coastal spring
 dazdiâk = rainy wind from sea (sirocco etc.)
 galbÿnna (Vrbnik: gelbîna) = bottom trough (seafloor depression)
 gârma * (Vis & Mljet: gârma) = submarine or coastal cave
 garmàc (Rab & Dugi: zâglav) = abrupt cliffy cape (escarped promontory)
 garmâda * = porous sea-cliffs with numerous caves
 garmâli * = dwellers of sea caves (speleobionts)
 garmÿca = minor half-cave in seashore
 garmÿna * = giant coastal cave (sea-cavern, overhang gallery)
 gëti * = coastal canyon gorge (ravine-cove)
 jambûur * = roaring of stormy waves on the shore
 khôgul * (Dugi: kôgula) = big stone rounded by sea surf
 kogulÿce (Vis & Dugi: babûl #) = rounded pebbles on beach
 kogulÿna * = giant block-stone in seashore

- kukūur * (Vis & Dugi: sōlina) = lagoon (swampy seashore)
 kukūrje * = estuary (river delta)
 kukūrni * (Vis: bocāti) = lagunar, estuarine
 kulāpp (Vis & Dugi: kùlaf #) = ocean, offing (from Greek: **kolpos**)
 kulāpje = giant waves (from Greek: **kolpoi**)
 kulāpni = oceanic, pelagic
 kulapÿna (Vis: kulpoda #) = stormy sea (Greek: **kolpoma**)
 kwōra * (Vis & Dugi: vela stinā) = giant sea-cliff (lofty coastal escarpment)
 kwōrica (Vis: gārmica) = minor sea-cliff
 kworyte * = long series of sea-cliffs
 mejmōri = subsaline water (in lagoon)
 melūra (Vis & Dugi: bānak #) = submarine sandbank
 micazāla = minute beach (beachlet)
 mihýrre (Lošinj: jadrūn) = big sails (of a ship)
 ostānn (Vis: cūfi #) = dissected pinnacle of sea-cliff
 plād = stormy beach of dumpy stones (Greek: **plaga**)
 pulnēb = south (Brač: polnēb)
 pulnēbni = southern
 semērra * = west
 semērni * = western
 seunemōri = deep sea (oceanic bottom)
 sinjavÿna (Vis: modrīna) = open sea blueness
 sionsyūn * (Vis: ragānj #) = the strongest hurricane (tornado)
 sipūun (Vis: salbunāra #) = coastal sand dune
 skopāal (Vis & Dugi: škōj #) = rocky islet (from Greek: **skopelos**)
 škōpje (Vis & Dugi: škōlji #) = karst archipelago (from Greek: **skopeloi**)
 sopōtt (Vis: šušūr #) = sea murmur (sound on shore)
 spuhotyĵna (Vis & Dugi: barlavēnto #) = windswept shore (stormbelt)
 sýrba * (Vis & Hvar: stinīva) = coastal ravine (**xirbes** in Avesta)
 syūun (Vis & Dugi: šijūn) = storm, gale (**siuni** in Avesta)
 syunēra (Vis & Dugi: šijunāda #) = devastation by hurricane (heavy storming)
 šajāvica = abrupt coastal slope
 škālnica = tide-pool (surf-pool)
 škardūun * (Dugi: grotīna, Vis: grotām #) = inaccessible karst shore (karrenfeld)
 škarÿna * = coastal cleft (deep narrow inlet)
 šlanÿlo = sea salinity
 šmogōrje * (Vis & Dugi: rosā) = night dew on sea
 tarāca (Vis & Dugi: bonāca #) = quiet sea (Greek: **taratta**, Vedic: **taranta**)
 tepcÿna (Vis & Dugi: teramōt #) = coastal quake by stormy waves
 tohōr * = north
 tohōrni * = northern (Brač & Hvar: bŭrnji)
 twardÿna = hard rocky seafloor
 urÿn * = hurricane roaring (stormy rumble)