This paper is a review of the application and comparison of management strategies in the production of medicaments, expounded in the previous paper. The treatment of medical plants—opportunity and feasibility of the Yugoslav industry (Chemical Industry 57 (2003) 171). The technical and technological project and analysis consist of technical and technological documentation (of the basic technological project) and have specific technological aspects. This theory also includes the analysis of feasibility, work dynamics and techno-economic parameters or the specification of the expenses for all the technical and technological elements. By studying the technology, data was collected for technical and technological analysis as the basis for the economic report. With minor projects this analysis wasn’t done separately, but with crucial elements within a special unit, and thus became a part of the report on the economic justification of the investment. The methodology of choice implies the evaluation of the profitability of the project, and its socio-economic efficiency, and thus the evaluation from the point of risk. The exemplary project was done in two versions (by the author of this paper: as a reconstruction of the existing output capacity and as completely new production), with mutual comparison, and a production which wasn’t similar to this one, but competed for the same means when the final decision upon the choice of the project was made. In the process of technology management, through technical and technological analysis, the subject of investment according to the range and quantity was defined, as well as the parameters needed for the calculation and just evaluation of the profitability of the phytotherapeutic range. The technology for the production of herbal tonics and medical wines, and the production of blister confection was shown in the form of block (blueprinting) and processing schemes.

If we put aside herbal cosmetic products for body care and foodstuffs (ecological, health food) due to general widespread use and different output technology, as well as legal limitations, the term accessory medicinal means in a narrower sense is used for [1]:

1. Herbal teas
2. Diet products
3. Herbal drops
4. Gels, lotions, creams and oils
5. Herbal tonics and medical wines, and

The basis of the raw materials and the choice of technology—during the choice and the composition of the line, as well as the innovation of an already existing one, and based on the performed research, the following technological parameters are taken into consideration: the percentage of the usage of medicinal herbs, only in the production of teas ranges from 32% (dog rose/Rosa canina) to 94% (Indian tea). During other treatments (extraction), the losses are even greater. A small percentage of usage of the dry substance, with some plant, enhances the production and influences the technological form of the treatment. Great, additional losses during drying and transport are yet another problem for the producers of phytotherapeutic products. Experts continuously control the average values of the losses, which usually vary, depending on the time of the gathering, the location of the terrain, type of soil, etc. Technology management, from the point of view of the available raw basis, also determines the production, which can be further applied and developed. The paper includes technological procedures for production, which determine the form of the product, manner and segment of application: of herbal drops, tonics, medical wines and the products of blister confection.

**TECHNOLOGICAL PROCEDURES**

These procedures (which are considered to be a business secret of an enterprise, together with the recipe) are shown in processing schemes and
organigrams for every type of production separately, together with the description of all the phases, processes and necessary equipment. Based on a developed technological review, an investment calculation is set, as well as an economic and marketing evaluation of the phytotherapeutic project [2].

1 Herbal drops – tinctures obtained through the process of extraction of medicinal herbs, appear on the market as: 1) liquids 2) herbal fluid extracts, and serve for the production of medicines, foodstuffs and cosmetic products. Ethnic oils are a very complex mixture of aliphatic, aromatic and hydroaromatic compounds, which consist of various hydrocarbons, alcohols, aldehydes, ketones, esters, phenols, acids and other substances (Figure 1).

II Herbal wines – these additional medicinal means are produced based on the regulations for each specific type of product. Concentrates of medicinal herbs, as well as the means for taste improvement are obtained by means of import or they are of domestic origin, and the technology of refining implies mixing in a single working procedure. The wine alcohol is the most appropriate and biologically most valuable solvent for many herbal substances, which cannot be extracted by water. Furthermore, alcohol i.e. wine, represents the most natural means for conserving. In such a situation, herbal substances can be preserved for a long time, while in aqueous solution they are dissolved or deactivated in a couple of hours. Alcohol enhances the permeability of the stomach mucus membrane for herbal substances. With it the blood circulation of the small intestine wall is improved and thus indirectly the resorption of the active principles of the herbal extracts. The dosage of the alcohol in herbal wines is extremely low, from 1 to 4g per day (for example, one glass of wine contains up to 30g of alcohol). As is scientifically proven, alcohol is, in a small dose, an efficient medicine, with which so called positive cholesterol (HDL-cholesterol), which has a protective function of the heart and blood vessels, is enhanced (Figure 2).

The technology of refining – (Figure 3) – for these tonics, protective procedures, which are scientifically proven and strictly controlled according to the pharmacopeias of certain countries are used. A winegrowing strain, rich with sugar and of good taste is used for the wine. Before each step of the refining the contents of alcohol are controlled. When the alcohol is used as a solvent, it is best that the raw material is molasses, originating from sugar cane (as in the Bittner’s elixir). But if it is a case of improvement 96% ethanol (spirit of wine) is used (or brandy with Vupik’s tonics). In the case of the production of specific kinds, there are different production regulations; all of the refining procedures are performed in cool chambers.

Boilers made of steel or plastic are used for the mixing. After the pumping of wine, the content of alcohol is determined. In order to achieve an improvement of minimum 18.5%, with the calculation of the mixture, the necessary quantity of alcohol is obtained. The contents as mixed with a mixer, pump or a mixing stick. After adding the extracts, it is made sure that possible sediment is washed off with the mixture of wine and

Figure 1. Schematic process of producing drops
alcohol and is once again added to the mixture. It is necessary to mix the contents for five minutes, after which the content of alcohol is checked and a possible correction is performed. Then it is left in the cooling chamber for 10 to 14 days. The next stage is filling, after which an organoleptic control of the colour, the height of the filling, taste and appearance of the alcohol content is done. It is the duty of the manufacturer to send a specimen of each load to his and the licence owner's laboratory. Forwarding is done only after the receipt of the approval for putting into circulation, given by the authorized health facility. In order to calculate the market prices, the following suppositions, gained during the research procedure are used: the percentage of the herbal concentrate in the final product cca 10%, of the wine cca 82.5%, and of the alcohol cca 7.5% [3].

**Calculation of the mixture for the herbal tonic, named “Venoton”**

<table>
<thead>
<tr>
<th>Alcohol</th>
<th>Wine</th>
<th>Concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.90% vol.</td>
<td>11.70% vol.</td>
<td>5.53% vol.</td>
</tr>
<tr>
<td>74.20</td>
<td>68.67</td>
<td>5.53</td>
</tr>
</tbody>
</table>

For 1000 l of the final product, the following is approximately needed:
- 66.36 l of distillates
- 824.04 l of wine
- 106.00 l of concentrate

996.40 l total, with approximately 18.5% vol.

A wide range of medicinal herbs with mild effects, from the given example is mainly with a domestic raw basis. The list of concentrates is less interesting for the export of the medicinal herbs and more for the export of the extracted products: the nettle seeds, the buds and fruits of hawthorn, the leaves of lemon balm, grape hyacinth, hops buds, rosemary leaves, wild chestnut leaves and seeds, mistletoe, dandelion, Artemisia absinthium, mint, buckthorn's bark, artichoke, forest lichen.
III The description of the blister confection production (‘Bio light’ capsules, producer Bittner–Austria)

Bio-light capsules are made of the herbal powder of different plants, known for their curing effects, with which the capsules made of hard gelatin are filled. The production of these capsules has several productive operations: first of all it is necessary to grind the dried herbal material, which is previously cooled, and then the obtained powder is sifted and filled into capsules made of hard gelatin. The capsules are then counted and automatically filled into a brown, glass bottle with a bolt lid. Certain operations of this process are given in a way which is demanded by authorized institutes, when submitting a claim for an expert’s statement, which is then submitted to the Ministry of Health, in order to receive approval to perform production activities.

1. The process of production

Grinding of the herbal material—the herbal material is frozen with liquid nitrogen, after the input control (up to 196°C) and then ground into powder in a plant mill (CONDUX CUM 100).

Sifting of the herbal powder—the herbal powder obtained by the grinding operation is sorted in a sifting tower (RETSCH VIBRO) and an adequate size of the grain is used for each plant for further processing, according to the firm’s internal regulations.

Filling of capsules—filling of the herbal powder is completely automatic, in a capsule filling machine (merry-go-round), with 9 stations, each containing 3 capsules (producer HARRO HOFLINGER; KFM III, model: 1991). Each load of capsules is subjected to a final control based on random samples.

Counting of the capsules—using the machine for counting and filling the capsules (firm KING TB 4), they are automatically counted and filled into brown glass bottles.

2. Explanation of the applied technology

Cooling of the herbal material with liquid nitrogen, at the above mentioned temperature, enables the grinding of the plants in mills, with preservation of their etheric contents. During the process of grinding, due to friction, high temperatures develop, which can destroy many active substances (such as vitamins, proteins, glycosides etc.). This can be prevented, if the herbal material is previously frozen. Thus, the active substances which exist in a plant, remain preserved during the whole process of treatment. The advantages of refining in capsules of hard gelatin lie in the simple and precise dosage, and the easy handling and protection of the powder from moisture, light and oxygen. With this treatment of the herbal material and its preservation and the possibility of precise dosage, and with the help of hard gelatin capsules, a modern and comfortable possibility of the application of medicinal herbs is obtained. This represents a competitive advantage for manufacturers, from the marketing point of view.

Tablets and pastils

From the technological point of view, there are no differences between tablets and pastils. Those products which appear on our market, differ by their purpose. Pastils are intended to be used in the oral cavity, that is, they are not to be swallowed but sucked. The areas of their effect are mainly the mouth and the upper respiratory tract. Tablets are swallowed, dissolved in the stomach and affect systematically through the bloodstream. Previously pastils were produced, by the so called damp procedure, and extracted from the amorph mass, rolled in a thin layer and additionally dried. Today pastils are produced in the same way as tablets, and they differ by their contents (they have more sugar and a different taste). Further on, pastils are called tablets in every context, except in the domain of the segmentation of the products, in accordance with the manner of consumption (ie. differentiation of the products connected with the area of, application—in the case of children).

Description of the production process—(Figure 4): Production starts with the taking of the necessary raw material from the storage, and weighing is performed in the granulation room. The remaining raw materials from the original packing, in accordance with ISO standards concerning the handling of the materials, are neatly packed, fastened with scotch tape and sealed with a label, signed by the technician who took the necessary quantities of raw materials and the already opened package repacked. In the granulation room, the weighing of all the necessary raw materials is performed, which are then, by sitting, placed into a clean vessel of the circulating mechanism for the granulation. A sample of the raw material taken from the

![Figure 4. Block diagram of the production of capsules](image-url)
opened, original package, is taken to an analytical laboratory, where immediate identification is performed. Together with chemical analysis, label identification is done in order to check if they contain all the necessary data. Granulation is performed in special granulation mechanisms, which have an explosive opening and are fixed to the outer wall, because the of exit of the explosive passage. When the vessel is filled with quantities of mixture regulated by the technological procedure, it is fixed to the circulating granulation equipment, where the mass is homogenized by letting the air flow (2-3 min). Further granulation is done by spraying the granulation solution above the mass, which due to the air flow, circulates in the granulator. The amount of spraying solution, the speed of spraying and the position of the clips is regulated by technological procedures and controlled by standards. Then the vessel is taken to the machine for regranulation in order to obtain equally sized granulates. After this operation, the granulate is subjected to swelling, and after homogenization the granulate, ready for the process of tablet making, is taken to the tablet making room or the intermediary storage. Tablet making is mechanically done, after which depowdering and intermediary storing is done, until the quality research results are obtained. In order to shift the tablets into the space for packing into blisters, packable carton boxes, and then to the box display.

For the production of hard and soft gelatin capsules, pears, and tablets, there are regulated technological procedures, controlled by GMP principles and ISO standards. This technology sets a claim of application of the technological restructuring strategy to Yugoslav medicine manufacturers. The basic investment concept originates from the previously achieved results in production (data in the subsistence and financial points), from other experiences, and the results of performed research. The intention of phytotherapeutic manufacturers from the example, was to close the technological process of wine production, by winning new production and using products from the higher refining level. Techno-economic parameters, within which the phytotherapeutic products give economically acceptable effects, depend on: the duration of product demand and services, technological and technical duration of the basic means, duration and the possibility of restoration of the raw basis, the time of credit repayment and the duration of common investments.

**STRATEGIC TECHNOLOGY MANAGING**

For the presentation of examples for technology managing, internal standards of the manufacturer were used, pharmacopeic practice (Yugoslav and Austrian), and a certain methodology was applied in the presentation of the choice of technology, the so called logical flow model, in the description of the production of phytotherapeutic products. Initial data that were available from the manufacturers of additional medicinal means, together with scarce literature and the official results of domestic institutes, the so called Drug examination and control institute, were used during research of the technological basis. The goal was to adopt parameters necessary for establishing a market-financial analysis and the evaluation of a phytotherapeutic line. It was commonly observed that most of the raw materials for this type of production, are of domestic origin and that the rest of them are imported. Thus, analyzing the productive possibilities and potentials of our country in connection with phytopharmacy, one can criticize the import of concentrates of medicinal herbs that thrive in our region as well as the fact that this data used for analysis, is not available to expert pharmaceutical personnel.

Flexibility in managing and production is achieved by combining technologies such as CAT, CAM, CIM, FMS and EDI. According to Ford [4], technology managing includes strategic elements of obtaining (bought and produced) and the exploiting of technology (internally and externally). According to Lamb [5], the technology portfolio matrix (a low level of importance attributed to technology and a high relative technological position) applied within Yugoslavia and through the production of phytotherapeutic products on the example of "Hemofarm" industry from Vrsac, determines the position of this manufacturer. Managing the phytotherapeutic line as a set of all productive lines and products, represents a possibility to efficiently combine the expectations between social needs and available resources, that is to say to reconcile the needs and the possibilities of the consumers, and material resources with the suggested technological concepts. In the cases where the influence of the environment is less, managing implies finding different combinations within a range, which secures the maximum fulfillment of all the goals (the number of lines within a range is legally determined).

The dynamics of the terms, conditions that the managing of the range, through introducing and eliminating products and productive lines, should be optional for a longer period of time. By reconciling the optional choice, an exaggerated diversification or integration of the program with strategic options for expanding the sources for profit achievement and touching points of the enterprises with environmental factors, by greater involvement of the managing structures, is avoided. According to J.Todorovic [6], certain extremes within strategic solutions for the managing of the range, are present due to the aversion towards the elimination and influence of sentimental moments on the one hand, and on the other due to quick decision making, under the impression that a "better alternative" exists; alternatives exist in determining the criteria for product evaluation, shaping of the adequate body and securing adequate information of the existing products and other alternatives as well.

When deciding upon changes within a range, accepting the concept of the life cycle of the products as a consequence of technical, market and competitive maturity, assumes an accomplished step of positioning
the products from the profitability point of view and the
developing function of the manufacturer.
Phytotherapeutical products may be classified
according to Drucker’s theoretically known division as:
future carriers of profit and growth of the manufacturers,
present profit and growth carriers, products which can
become potential profit carriers, if they are subjected to
radical changes or if some crucial external factors
should change, yesterday’s profit and growth carriers
which are in the phase of stagnation within the line of
sale and profit, products which still sell, but did not fulfill
the great expectations of the investors, and productive
projects which failed [7]. Analyzing the products within
the phytotherapeutic range, as well as the positioning of
the products and strategic decisions, must aim at
eliminating negative and forcing new actions, in order to
improve the positions of the products, which have been
classified according to this author as the 11 known
categories.

The choice of managing concept

The matrix of the policy of directing the products,
starts from the competitive ability and expected
profitability, and keeping in mind the state of the
products, it is possible to apply the following strategies:
disinvestment, planned product elimination, generators
of financial means, product control, perspective
products, products which can become the carriers of
growth and income, products which should be more
intensively supported and the leaders [8]. In order to
determine the conceptual scope in the planning of the
productive range, one can use the “product/market”
matrix and the strategic dilemmas are aimed at
productive aggregation (the decision making upon the
types, kinds and brands of products) and market
aggregation (the choice of the relative criteria used for
determining the hierarchy among market segments).
The curve of experience shows the empirically verified
phenomenon of how the work can be more efficiently
and quickly done, and is connected to the curve of
learning, and the achieved effects are the results of the
additionally added factors: specialization and alternation
of the working tasks, betterment of the products and
processes, rationalization methods and systems, the
economy of size and organizational improvement.
The portfolio technology as a concept was taken over from
the capital, and the starting point in marketing is
represented by the research of different ways of
combining the market and the products as the basic
potential sources for the growth of an enterprise.
Technology managing begins from levelling the support
by key technologies in order to support the competitive
positions, as opposed to the support of the coming
technologies which are significant for making the future
competitive position [9]. By applying this concept, an
interdependence is explicitly achieved among different
jobs or products within a range, and thus their role in
achieving the longterm goals is determined [the same,
p. 241]. Through the modification of new concepts,
strategic solutions for certain managing aspects have
formed the following models:
- The matrix relative market share/growth of the market
  (with a classification of the products as stars, question marks, cows and dogs) where the contribution
  of a certain category is valued, that is to say the rate
  market growth on the cash-flow in order to choose the
  strategic options: to build, to keep, to harvest or to
disinvest,
- The matrix of the industry attraction/ the power of a
  business,
- The matrix of the policy directing (Snell’s model),
- The portfolio matrix of the life cycle (ADL matrix).

Deciding upon mix of products

Product research is done within the scope of a
review of activities, which are defined by terms, together
with the following elements of productive mixture [10]:
1. Product proposal:
   - recipe and applicational form of the products
   - nutrition basis and justification for introducing the
     products
   - abbreviated market analysis
   - separate dosage and packing of the products
   - prediction of turnover
   - technological problems
   - controlling and analytical problems
   - legal regulations when registering the products
2. Problems of regular and experimental production:
   - evaluation of the productive possibilities
   - technological problems when packing the products
   - form of the technological innovation
   - provision of raw materials for zero production,
   test load with control analytics used for testing the
   products
   - balance and provision of raw materials for
     regular production
   - determination of the dead line for the finalization
     of the phytotherapeutic products
3. Production of the commercial packaging
   - textual and picture solution of the packaging
   - final solution of the packaging and inner instrucions
   - printing of the packaging, production deadlines

Product research is usually performed together
with other marketing instruments. The decision on the
mixture of products/ranges is defined as an assembly of
all the productive lines and articles which are offered by
the vendor for sale. Each line can consist of several
sublines, and each line and subline can have more
separate articles. The lines of the products within the
phytotherapeutic range are formed in accordance with
the existing division, which is legally regulated. The
mixture of products is expressed through the width,
length, depth and consistence of the range. According
to P. Kotler [11], the consistence of the productive mix
refers to the degree of connection of different lines of
products in the final consumption, in the demands of the
production, in the distribution channels (wholesale drug
supply points, pharmacies, etc).
The differentiation strategies of phytotherapeutic products

On the example of Bittner’s elixir we may see the growth strategy of a new product only for our market. On one of the already won markets, by developing and buying the licence, Vupik started by introducing products with a completely new use, but technologically similar (he conducted a combined strategy). In the case of introducing the herbal capsules BIO-light, there is the diversification strategy. This is a development of completely new products on new markets, based on results obtained researching markets, where similar products have already been introduced, the research being performed on pharmacists (channels of distribution) and potential consumers of the product. Observing this interdependence of marketing and technology [12] on our market, we obtained some examples of the following strategies (the data has been collected in the scope of research of the competitive products) [Figure 5].

Vupik example: Regenerin - herbal tonic; the manufacturer later also developed the production of capsules ("Zdravije" also used this example). Kapriviit–tonic extracted from nettle seed; demand has been used and aimed at selling soft capsules, which were then completely new on our market. "Zdravije" packs these capsule without previously producing the tonic. Galiogran, a tonic, was initially produced and sold in the form of tablets. Through other refining procedures, the phase of maintenance was prolonged to Granobil, a tonic extracted from forest lichen, in the form of pastis. Vupik performed the strategy of quick penetration, in the phase of introducing the products; in the phase of growth he performed the strategy of adding products and entering new market segments by involving new channels of distribution. During the maturity phase, he performed the strategy of market modification by increasing the number of consumers by taking over the competitive consumers; and by increasing the consumption of already existing consumers by more frequent and diverse use (this strategy was also confirmed by Austrian Bittner); also product modification through the improvement of the characteristics (Sinusan drops). In the decreasing phase, the strategy of intentional reduction of the sole and support by promotional media [13] was created, through a matrix of strategic options, depending on the different technological curves on one hand and whether the enterprise is ahead or behind its competitors on the other hand.

Galenica example: which has for this type of production the absolute comparative advantages (personnel potential and productive resources), but has no interest, because it basically implies the change of the production concept and aiming towards completely new markets. It is common that the world biggest drug manufacturers are prejudiced in the case of these products, because a vast amount of means has already been invested in the development of new drugs, made of synthetic materials and also because phytotherapeutic products have been underestimated in comparison to the production of medicines carried out by the personnel, which performs research and development projects. This is the case of "Hemofarm", which except the test with dissolving tablets and some other dietetic products (TOP POWER, Multivita) and the medical "Missing collection", did not enter the diversification of phytotherapeutic products through the blister confectioning technique.

When developing the strategy for phytotherapeutic products, it is best to conduct differentiation from the ecologically aspect [14]. The differentiation of the consumers from the aspect of "eco" products, starts from observing the consumer in a new light: he is no longer endangering the environment, but he is taking care of it. We define the ecological product as the instrument for gaining at the same prices as compared to the competition. It is more expensive, as the same the "eco" product is offered as product with an additional value [15]. By introducing these strategies of differentiation, it is often forgotten that competitive products also become ecological, and that in the case of phytotherapeutic products, since their production basis is ecological, the possibility of differentiation stands in comparison to the technology of refining and packing materials which can dissolve. The manufacturer of "Bittner's elixir" used the differentiation of products, due

| Strategies A | Technological guiding strategies, not by marketing. The factory has a high level of technological specification, innovation oriented, with high-tec products. |
| Strategies B | Balanced strategies: new product adjustment with existing programme, marketing oriented. |
| Strategies C | Technologically insufficient strategies, new products form part of low-tec product, it has few new products in the product-line. |
| Strategies D | The investment in research and development is low. They are opposed to strategic change, and are introducing new products with the smallest differential advantage. |
| Strategies E | High research and development investment, with strategic variety. The products form part of different groups. They entry radically on new markets. The target market has growth potential, but are not competitors. |

| GALENIKA | Product-line of balms and capsules |
| HEMOFARM | (Missing collection. dietetics) |
| ZDRAVLJE, EAST-WEST | |
| ULPIN, DR JOSIF PANIC | Small producers, mostly tea and plants essence. |
| ZORKA - Phytopharmaceutical products | |
| VUPIK, Technologically completed product-line (tonics, herbal wine and blister products). | |
to their manner of use (the place of the effect i.e. tablets and pastis) for larger and smaller packages (from 50 ml to 500 ml, in comparison to the standard 250 ml which is enough for 1 treatment). This was possible, because through the research of number of consumers of this package was determined, that it was not used as treatment, but applied externally (insect stings, cosmetic purpose...), as well as the households which use it within a family. In the same way, a segment of women was determined, who use "Bittner's elixir" for cosmetic purposes (as a cheap face cleaning agent) and a segment of men who can barely tell the difference between these products and other alcoholic drinks, like the paraphrase says "they drink and it does them no harm, and yet it cures". The factor of segmentation in comparison to the profile of the consumers, according to the manner of consumption (children), is very important from the market point of view. It is well known that this group prefers products with blister packaging which are shiny and of good taste (i.e. pastis instead of tablets and syrups) or those which have sound effects (hissing sound) when used.

The characteristics of the branch as a factor of recovery in the reconstruction of production [16] was also determined by the rate of technological changes. This approach stems from the essential purpose of the products. The conduct of the technological reconstruction strategies [17] in our case cannot be observed separately from the decreasing tendency of the technological innovation rate on phytotherapeutic products, which should be characterized by the strategy for stagnating markets.

IZVOD

STRATEGIJSKO UPRAVLJANJE TEHNOLOGIJOM U FITOFARMIJU

(Stručni rad)

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Iz primera je vidljivo da preduzeća stežena znanja o dejstvima fitoterapijskih proizvoda (licencu ili još češće marketinški 'know-how') žele maksimalno iskoristiti, pa često razvijaju izgled, tj. tehnološki oblik proizvoda za određenu, na tržištu već potvrđenu indikaciju. Postojanje heterogenosti tržište za pomoćnim lekovitim sredstvima, usled razlika u potrebama, stavovima i načinima reagovanja na pojedine komponente porude uslovljava da preduzeće kombinuje marketing varijable na tržišnim segmentima; učitavajući razlike aktivna razvoj proizvoda kroz inoviranje asortimenta ili poboljšanja na proizvodima. Nova dimenzija marketinga pored želja, potreba i preferencije, uključuje brigu, odgovornost za zaštitu okruženja definisanim standardima Jugoslavije i drugih zemalja. Konkurencnost uz cenu i distribuciju, dobija novu crenicu "prijatelja čovjeka". Prema tome se forma i cena i ostali uslovi prodaje. Tehnološki katalog kao sredstvo planiranja polazi od identifikovanja tehnologije svih proizvodnih linija u asortimentu. Proizvođači fitoterapijskih proizvoda u analizi treba da istraže sledeće: značaj tehnologije, naglasak u tehnologiji (redukcija troškova ili performanse proizvoda), poziciju u životnom ciklusu tehnologije i konkurentsku poziciju u grani. Ovi proizvođači svoju tehnološku poziciju morali bi posmatrati i identifikovati je u svetu dolazećih i budućih tehnologija, a istraživanja stranih fitoterapijskih proizvoda na našem tržištu pokazuju da se pozicioniranje proizvoda uopšte ili veoma malo provodilo u fitofarmaciju.

REFERENCE


Ključne reči: Fitoterapija • Fitodijetika • Biljni tonici • Proizvodi blister konfeksije • Zdravstvene tegobe • Eterična ulja • Lekovita svojstva biljke • Key words: Phytotherapeutics • Phytodietetics • Herbal tonics • Blider products • Health difficulties • Essential oils • Medical Properties of a plant •