

Guide to Bonsai Care Through the 4 Seasons

Understanding the bonsai cycle is the foundation of balanced care.

A bonsai does not respond to isolated actions, but to physiological processes that are activated according to the season. Understanding this cycle allows for informed decisions, prevents imbalances, and supports the tree's natural development throughout the year.

Bonsai care is not a sum of isolated tasks, but a cyclical process linked to the tree's natural rhythm. Each season activates different physiological functions and requires specific decisions regarding watering, nutrition, management, and prevention.

Understanding this annual cycle is essential to act with precision, avoid common mistakes, and maintain trees that are balanced, healthy, and aesthetically coherent over time. This guide is designed to accompany that process, integrating traditional bonsai cultivation practices with technical solutions that respect its natural rhythm.

Spring:

Beginning of vegetative activity and reconstruction of balance

Spring marks the beginning of the bonsai's active cycle. After winter dormancy, sap circulation resumes, buds awaken, and new growth begins. This is a critical phase: much of the year's development depends on how this moment is managed.

- During this season, the bonsai combines a progressive increase in root activity with strong aerial vegetative growth. The balance between both is key to avoiding weak shoots, imbalances, or unnecessary stress.
- The root system begins to regenerate and produce fine active roots. Above ground, leaves and new shoots emerge, with a high demand for nutrients and micronutrients. The tree uses part of the reserves accumulated in autumn but must begin receiving controlled external nutrition.
- This is the appropriate time for repotting, moderate pruning, and design corrections, always respecting the condition of each specimen.
- Repotting and root ball inspection are carried out when required, adjusting watering and exposure after intervention. Regular watering begins, avoiding waterlogging, and young shoots must be protected from late frosts or sudden temperature changes.
- Nutritionally, the bonsai needs stimulation of new root growth, homogeneous bud activation, and a balanced supply of macro and micronutrients. It is equally important to maintain a healthy root environment to ensure proper nutrient absorption throughout the season.
- In this phase, excessive intervention must be avoided. A recently activated tree still partially depends on its internal reserves. Forcing heavy fertilization or combining aggressive techniques may generate imbalance between the canopy and the root system. The key in spring is not to accelerate growth, but to consolidate it: allow shoots to stabilize, roots to develop steadily, and the tree to enter the active season with structural vigor rather than uncontrolled growth.

Recommended Products from the Zoka Range

- **Zokamin Roots** is used after repotting or whenever root development needs to be reinforced, promoting the emission of new roots and ensuring proper tree establishment.
- **Zokamin Spring** supports the beginning of vegetative growth by providing balanced nutrition suited to this activation phase.
- **Zokamin MicroFe+** helps prevent and correct common micronutrient deficiencies in spring, promoting healthy, compact leaves with an intense green color.
- **Zokabio Algas** acts as a natural biostimulant, strengthening the tree's basal metabolism and helping it adapt to increased activity after repotting or pruning.
- **Zoka PoliCarbol** improves substrate quality and activates beneficial microbiota, creating a more stable and functional root environment following spring work.

Summer:

Management of Vigor, Water, and Heat Stress

Summer is the most demanding season for bonsai. High temperatures, increased solar radiation, and elevated transpiration require precise water and vigor management.

- The tree is in full activity, but any imbalance can quickly lead to water stress, weakening, or pest outbreaks. The main objective during this season is to maintain activity without forcing it, protecting overall health.
- Physiologically, the root system works continuously to compensate for water loss, while foliage regulates activity according to heat and environmental humidity. Excessive vigor or inappropriate fertilization may cause elongated shoots, oversized leaves, or structural weakening.
- Watering must be frequent and adapted to each species and substrate, avoiding both drought and waterlogging. Partial shading may be necessary for sensitive species, along with adequate ventilation.
- Intensive pruning or aggressive structural work is not recommended. Daily observation is essential to detect stress symptoms or pest presence such as mites or aphids.
- Heat stress does not always appear immediately. Slight midday leaf drooping may be a normal physiological response, but if the tree does not recover turgidity by evening, cumulative dehydration may be occurring. Proper microclimate management — positioning, ventilation, and control of reflected heat — is as important as watering itself.
- Salt accumulation in the substrate should be avoided, particularly in small pots with frequent irrigation. Occasional leaching with abundant, well-drained water helps maintain root balance. The key in summer is not stimulation, but stability: preserving functional foliage, active roots, and a structure that reaches autumn without weakening.

Recommended Products from the Zoka Range

- **Zokamin Flow** is used to stimulate a controlled flush of growth when the tree is physiologically ready, promoting denser ramification without forcing excessive vegetative development.
- **Zokamin MicroFe+** remains a key support product to maintain nutritional balance during periods of high metabolic activity.
- **Zokabio Algas** helps increase the bonsai's resistance to heat stress and supports the maintenance of active metabolism under demanding environmental conditions.
- **Zokamin Kitosan x3** reinforces the tree's natural defense mechanisms and improves its capacity to respond to environmental stress, light pruning, or pest pressure.
- **Zoka PoliCarbol** keeps the substrate biologically active and stimulates beneficial microbiota, enhancing nutrient uptake even under intense heat conditions.

Autumn:

Reserve Accumulation and Preparation for Dormancy

Autumn is a fundamental transitional phase in the bonsai cycle. As temperatures decrease and daylight shortens, the tree gradually slows vegetative activity and redirects its energy toward reserve accumulation

This transition is progressive. Aerial growth diminishes, internodes shorten, and tissues mature and lignify, preparing for winter dormancy.

- These reserves are crucial for proper spring bud break. During autumn, the tree transforms absorbed nutrients into carbohydrates and storage compounds that accumulate mainly in roots and trunk. Poor autumn management — through excessive interventions, inappropriate fertilization, or uncontrolled watering — often results in weak or unbalanced growth the following year
- The root system remains active throughout much of autumn, especially while substrate temperature remains stable. It is an ideal moment to strengthen roots, improve internal structure, and consolidate the balance between canopy and root system. Healthy roots in autumn mean a strong start in spring.
- Above ground, interventions are progressively reduced. This is not the time to stimulate tender new growth that would not mature before cold weather. Structural consolidation is prioritized over vegetative expansion.
- Light cleaning pruning may be carried out, removing weak or poorly positioned branches. It is also important to review overall plant health, removing fallen leaves or organic debris that may encourage fungal problems in humid conditions.
- Watering should be gradually reduced as temperatures drop and evaporation decreases. Although water consumption is lower, the substrate must not remain waterlogged. Maintaining aeration, drainage, and cleanliness is essential for entering winter in optimal condition..

Recommended Products from the Zoka Range

- **Zokamin Autumn** is formulated to promote the accumulation of nutritional reserves and prepare the bonsai for winter dormancy, supporting a stronger and more balanced bud break in the following spring.
- **Zokamin Enraizamiento** can be used at the beginning of the season to reinforce the root system, improving structural stability and enhancing the tree's overall resilience.
- **Zoka TricoFung** helps maintain a healthy rhizosphere by naturally limiting the presence of soil-borne pathogens and promoting a balanced and biologically active root environment..
- **Zoka PoliCarbol** continues to be a key support product for improving substrate structure and sustaining beneficial microbiota, optimizing nutrient availability and root function..
- **Zokabio Algas** reinforces the tree's metabolism during this transitional phase, supporting proper physiological adaptation to seasonal change.

Winter:

Vegetative Dormancy, Protection, and Control

Winter is the bonsai's resting phase. Metabolic activity is reduced to a minimum, especially in deciduous species. It is not a complete stop, but a deep slowdown.

- During this period, the tree reorganizes the reserves accumulated in autumn. Lignified tissues gain resistance, and the vascular system remains functional with reduced circulation. Buds stay dormant, protected until thermal and light stimuli activate spring growth.
- Although visible growth does not occur, care remains essential. Excess moisture, prolonged frost, and lack of ventilation are the main risks during this season. The most common winter problem is not lack of water, but excess, which can cause root asphyxiation and structural weakening.
- Watering is spaced to the maximum, applied only when the substrate is clearly dry. It is preferable to underwater than overwater. Even in dormancy, roots require oxygen, so drainage and aeration remain critical.
- Intense frost can damage superficial roots in small pots. Protecting the root ball through sheltered placement or insulation systems is advisable when temperatures drop significantly. Protection must still allow ventilation to prevent condensation.
- No fertilization or major structural work is performed, except in very specific cases for evergreen species. Fertilizer application during dormancy has no physiological basis and may cause salt accumulation. Major pruning is also discouraged due to reduced healing capacity.
- Winter is primarily a season for observation and planning. It allows structural evaluation in deciduous trees without foliage, wire inspection, and preparation for late winter or early spring repotting.
- In essence, winter does not require active intervention, but control and stability. Maintaining water balance, protecting against thermal extremes, and avoiding unnecessary actions ensure a strong and balanced start to the next cycle.

Recommended Products from the Zoka Range


- **Zokamin Kitosan x3** puede aplicarse de forma puntual para reforzar defensas en situaciones de estrés o debilidad.
- **Zoka TricoFung**, aplicado previamente en otoño, sigue actuando a nivel del sustrato, ayudando a mantener un entorno radicular estable durante el reposo.

木 ZōKa

Each season has its rhythm.


Zoka accompanies you every step of the way.





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