

Forest reproductive material

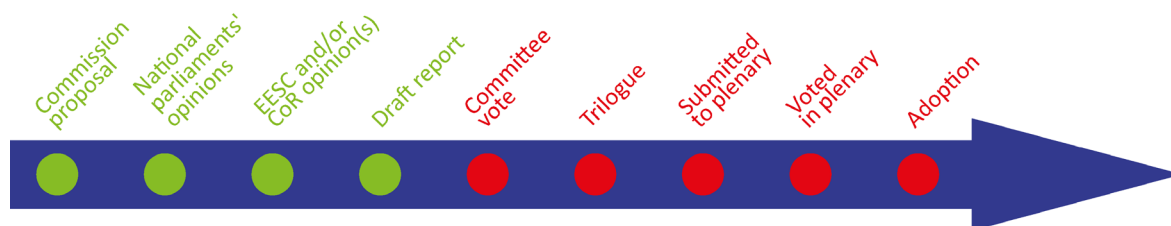
OVERVIEW

On 5 July 2023, the European Commission put forward a proposal for a regulation on the production and marketing of forest reproductive material (FRM) to replace the current FRM Council Directive. The proposal would widen the scope of the current legislation to include not only FRM intended for forestry purposes, but also FRM intended for biodiversity conservation, restoration of forest ecosystems and climate adaptation and mitigation. The proposal would specify the rules for the production and marketing of FRM intended for conserving forest genetic resources and would for the first time require that potential buyers be provided with information on the suitability of FRM for current and future climatic and ecological conditions. Member States would have to establish contingency plans to ensure a sufficient supply of FRM in cases of extreme weather events, wildfires and disease and pest outbreaks.

In the European Parliament, the file has been referred to the Committee on Agriculture and Rural Development, where discussions on the rapporteur's draft report are ongoing. In the Council, the proposal is being examined by the working party on genetic resources and innovation in agriculture.

Proposal for a regulation of the European Parliament and of the Council on the production and marketing of forest reproductive material, amending Regulations (EU) 2016/2031 and 2017/625 of the European Parliament and of the Council and repealing Council Directive 1999/105/EC (Regulation on forest reproductive material)

<i>Committee responsible:</i>	Agriculture and Rural Development (AGRI)	COM(2023) 415 5.7.2023
<i>Rapporteur:</i>	Herbert Dorfmann (EPP, Italy)	2023/0228(COD)
<i>Shadow rapporteurs:</i>	Isabel Carvalhais (S&D, Portugal) Irène Tolleret (Renew, France) Martin Häusling (Greens/EFA, Germany) Ivan David (ID, Czechia) Bert-Jan Ruissen (ECR, Netherlands) Luke Ming Flanagan (GUE/NGL, Ireland)	Ordinary legislative procedure (COD) (Parliament and Council on equal footing – formerly 'co-decision')
<i>Next steps expected:</i>	Vote in committee on draft report	



Introduction

On 5 July 2023, the European Commission put forward a [proposal](#) for a regulation on the production and marketing of forest reproductive material (FRM) that would replace the current [FRM Council Directive](#). The proposal is part of a [package](#) of measures that also includes legislative proposals on [plant reproductive material](#) (PRM), [new genomic techniques](#) (NGTs), [soil monitoring](#) and [food and textile waste](#), as well as a [communication](#) on sustainable use of natural resources.¹

FRM includes seeds, parts of trees (such as stem or leaf cuttings, explants, buds, layers, roots and scions) and planting stock (plants raised from seeds or parts of plants). Good quality FRM, planted in the right conditions and the right climate, can help ensure resilience of forests in the future, and can thus help the EU achieve its sustainability, biodiversity and climate goals.

EU forests cover around [160 million hectares](#) and account for 39 % of the total EU land area.² Although the area under forests has been [declining globally](#), in the EU it has been on the increase, growing by more than 5 % in the past 30 years.³ Six Member States (Sweden, Spain, Finland, France, Italy and Germany) account for more than [two thirds](#) of the total EU area covered by forests, while five Member States (Finland, Sweden, Slovenia, Estonia and Latvia) have [more than half](#) of their national territory covered by forests.

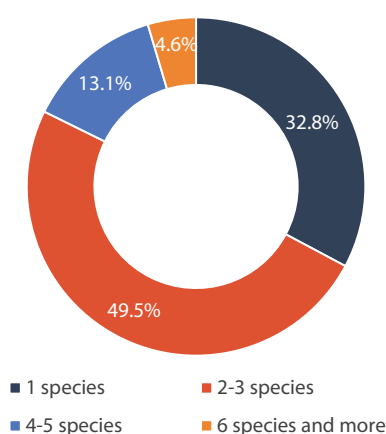
Forests provide multiple functions and [benefits for the society](#), from a positive impact on the [environment](#), including on air, water, soil and biodiversity, to a place for sports, recreation and reconnecting with nature. They are expected to play a crucial role in mitigating climate change, as they capture and store carbon dioxide from the air.

They also support the EU forestry and wood-based industry, which [employed](#) 3.2 million people in 2021, with an additional 437 000 people self-employed in the sector.⁴ The EU forestry and logging industry generated a total [gross value added](#) (GVA) of €25 billion in 2021. The GVA of wood-based industries, which counted some 393 000 enterprises, amounted to [€136 billion](#) in 2020.

According to the [European Environment Agency](#) (EEA), more than 90 % of forests in the EU are semi-natural and have mainly been planted. Around 3 % of forests are plantations and around 2 % are primary and old-growth forests. Over centuries, European forests have gradually become less diverse and more homogeneous. This has at least partly been caused by forest management practices that have favoured efficient wood production and by reforestation focused on a limited number of species. Today, 60 % of EU forest stands are composed of even-aged trees, and more than 80 % have three species or less (see Figure 1). This can make them particularly susceptible to damage from droughts, fires, pests and diseases, which have all been exacerbated by climate change.⁵

The [European Green Deal](#) and the [EU biodiversity strategy for 2030](#) emphasise the need to improve the quality and quantity of EU forests. The [new EU forest strategy for 2030](#) in particular announced several measures for forest restoration and reinforced sustainable forest management for climate adaptation and forest resilience, including the revision of the FRM legislation, in order to ensure the availability of large enough quantities of appropriate FRM and provide better information on its suitability for future climatic conditions. The strategy also announced an initiative to plant at least three billion trees by 2030, which will also require large quantities of quality FRM.⁶

Figure 1 – Forest area in Europe by number of tree species in 2015



Data source: [European Commission](#); graphic by Györgyi Mácsai, 2023.

Size of the EU FRM sector

Data on the EU FRM sector are limited. Quoting Eurostat figures, the Commission's [impact assessment](#) accompanying this proposal notes that the PRM and FRM markets have an estimated annual value of over €13 billion. However, this is based on the economic accounts for agriculture, which cover forestry only to the extent that it cannot be separated from agricultural activity, and therefore also accounts only for the portion of FRM that cannot be separated from PRM. Precise data is also lacking on the number of FRM producers in the EU. The impact assessment puts this number at more than 4 000 almost exclusively small and medium-sized enterprises (SMEs); however, this covers eight Member States only. Based on information provided by competent authorities from these Member States, only a small portion of FRM is exported, with the vast majority sold within the EU. A 2019 [paper](#), which sought to estimate the intra-EU trade in FRM for eight tree species (i.e. did not cover the sales of FRM that do not cross the internal EU borders), estimated the annual average trade in the 2004-2014 period at 30 million plants and 400 000 kilogrammes of seeds, but concluded that this was probably an under-estimation.

Existing situation

The production and marketing of FRM is regulated at the EU level by [Council Directive](#) 1999/105/EC on the marketing of forest reproductive material, which has been in force since 2003. It lays down rules for FRM intended for forestry purposes.⁷ The directive aims to ensure that FRM is genetically suited to the various site conditions and of high quality, and that biodiversity of forests, including the trees' genetic diversity, is conserved and enhanced. It requires imported FRM to comply with the same requirements as FRM produced in the EU. FRM intended for export or re-export, however, is outside of the directive's scope.

To be placed on the market, FRM must be produced from **approved basic material**, meaning trees that have been selected for their superior characteristics, such as their morphology, wood quality, health and resistance. These trees can take several forms:

- **seed source** – trees within an area from which seeds are collected;
- **stands** – a delineated population of trees that are sufficiently uniform in composition;
- **seed orchards** – plantations (such as a nurseries) that are isolated or managed to avoid or reduce pollination from outside sources and produce frequent, abundant and easily harvested seeds;
- **parents of family** – trees used to obtain progeny by controlled or open pollination of one identified parent used as a female, with the pollen of one parent or a number of identified or unidentified parents;
- **clones** – groups of trees derived originally from a single tree by vegetative propagation (e.g. by cuttings, grafts, layers or divisions);
- **clonal mixtures** (mixtures of identified clones in defined proportions).

The basic material can be approved for the production of four different categories of FRM. The lowest category, with the least strict requirements – the **source-identified** category of FRM – can only be derived from seed sources or stands located within a single region of provenance. Member States are required to demarcate these regions and are free to decide on the selection criteria and on whether a formal inspection is required. The **selected** category of FRM is similarly derived from a stand located within a single region of provenance, but has to be phenotypically selected for a particular purpose. The directive lists 10 requirements to be taken into account (such as origin, age, uniformity, health, resistance to pests, diseases and adverse climatic conditions, volume of production and wood quality), but Member States can assign them different weights. The basic material from which **qualified** FRM can be harvested is phenotypically selected for its particular characteristics at the level of individual trees, while the superiority of basic material for the production of the highest category – the **tested** FRM – must be demonstrated by comparative testing or calculated from genetic evaluation of the basic material's components.

The requirements for the approval of the different categories of basic material are set out in Annexes II, III, IV and V, but Member States can introduce more stringent criteria and can even limit the approval of basic material intended for the production of the lowest (source-identified) FRM category on their territory. Member States enter the basic material approved on their territory in their **national registers**. They also draw **national lists** – summaries of national registers – based on which the Commission publishes a **Community list of approved basic material**, available through the FRM information system ([FOREMATIS](#)) portal. Member States also make sure that FRM suppliers are officially registered and subject to regular official inspections.⁸

Once the basic material has been approved, the FRM can be harvested. For all harvested FRM, national official bodies issue a **master certificate** with a unique reference. FRM is marketed in lots and must be accompanied by the **supplier's label or document**, which includes the master certificate number, name of supplier, supplied quantity and, for seeds, purity, the germination percentage, the weight of 1 000 pure seeds and the number of germinable seeds per kilogramme.⁹ Seeds can be only marketed in sealed packages.

The directive also includes a derogation for the approval of FRM in the interest of **conservation of forest genetic resources**. Member States are allowed to approve FRM that is naturally adapted to local and regional conditions and threatened by genetic erosion. However, so far [no Member State](#) has applied for this derogation.

A Member State can prohibit marketing of specific FRM to end users if it has reason to believe that the use of the FRM would have an adverse effect on forestry, environment, genetic resources or biodiversity in all or part of that Member State. In cases of temporary difficulties in the general supply of FRM to end users, Member States can ask the Commission to authorise them to approve, for a certain period, FRM that satisfies less stringent conditions.

2013 reform attempt

In 2013, the European Commission [submitted](#) a proposal for a regulation on the production and marketing of PRM, which aimed to create a common framework for all PRM sectors, including FRM. However, in 2014, the European Parliament [rejected](#) the proposal, asking the Commission to withdraw it and submit a new one. Parliament in particular [opposed](#) the 'one size fits all' approach that would bring both PRM and FRM under a single regulation. Following Parliament's rejection, the [Council](#) continued its discussions and on 5 December 2014 invited the Commission to introduce a [revised proposal](#). The changes requested by the Council also included removing FRM from the scope. The Commission responded by [withdrawing](#) the proposal officially in March 2015.

Parliament's starting position

During the current mandate, while not specifically addressing the FRM rules, Parliament has repeatedly stressed the importance of planting trees that will improve EU forests' biodiversity and resilience. In its [resolution](#) of 9 June 2021 on the EU biodiversity strategy for 2030, Parliament underlined the importance of strengthening sustainable forest management in a balanced manner for the health, climate resilience and longevity of forest ecosystems and the preservation of forests' multifunctional role, including for maintaining forest biodiversity. It highlighted the value of incorporating genetic diversity into planting considerations, to limit the risk of pest attacks and of the spread of disease, and of local and native species. Parliament welcomed the EU's commitment to plant at least three billion additional trees.

In its [resolution](#) of 8 October 2020, awaiting the publication of the new EU forest strategy, Parliament called on the Commission to ensure that the Regional Development Fund also be used for projects aimed at putting a stop to biodiversity loss in forests, promoting mixed and native species planting and improving forest management. It welcomed afforestation and reforestation as suitable tools to enhance forest cover, especially on abandoned land that is not suitable for food production, close to urban and peri-urban areas, and in mountainous areas.

In its [resolution](#) of 13 September 2022 on a new EU forest strategy for 2030, Parliament noted that multi-age, multi-species forests with continuous cover are more resilient to climate impacts such as fire, drought and unseasonal weather events. It insisted that EU funds should not support monocultures. It highlighted that growing larger, resilient and diverse forestland also requires access to genetic resources and stressed the importance of supporting national seedling gene pools to provide local and regional reforestation and afforestation initiatives with a sufficient number of native tree species. It called for cutting red tape to increase the uptake of forestry measures funded under the common agricultural policy, including those that reduce biodiversity loss in forests and promote the planting of appropriate native tree species where suited to the specific environment. While welcoming the roadmap for planting three billion trees, Parliament stressed that suitable trees must be planted in areas with degraded land and those affected by desertification. It suggested the uptake of measures to introduce better-adapted European species and improved provenances in EU forests.

Preparation of the proposal

In 2021, the Commission produced a [study](#) that showed significant shortcomings of the current legislative framework. The study found that the legislation's lack of clarity and outdated provisions lead to differing implementation of FRM rules across Member States and that the directive's limited scope creates uncertainties about the rules applying to FRM for non-forestry purposes. The study also found that incorporating sustainability criteria in the FRM sector is impeded, as the directive does not contain any concrete provisions on the conservation and sustainable use of forest genetic resources. Other issues mentioned include the lack of clear rules on the information for the end users; poor coherence with the [Plant Health Law](#) and the [Official Controls Regulation](#); and inconsistency with the European Green Deal and other strategies stemming from it, including the [EU climate adaptation strategy](#) and the [European digital strategy](#).

Based on the study, the Commission proceeded with a consultation on both PRM and FRM. It received 66 responses as [feedback](#) to the roadmap for the new legislation. This was followed by a [public consultation](#) from 21 December 2021 to 27 March 2022, which received almost 2 500 responses from 29 countries, of which just over 1 900 came from citizens and over 200 from businesses.¹⁰ In addition, the Commission ran targeted consultations gathering feedback from competent national authorities and SMEs, a targeted survey, 43 in-depth interviews and a focus group run by an external consultant. [ICF consultancy](#) also produced a [study](#) in support of Commission's impact assessment (IA).

The [IA](#) (with its [executive summary](#)) covered both PRM and FRM and identified two main problems: a non-harmonised internal market creating divergent conditions for operators across Member States, and non-alignment of the PRM/FRM legislation with the objectives of the European Green Deal and related strategies. The IA found that there was insufficient supply of high-quality certified FRM, owing to the increasing demand for FRM for non-forestry purposes, as well as to extreme weather and disasters, which both increase the demand for FRM and create difficulties in its production. This was exacerbated by the insufficient assessment of sustainability characteristics in the registration of FRM basic material. The IA also mentioned incomplete information for end users.

The IA looked at three options, which all included a simplification of procedures and improved information to end users, but varied in terms of flexibility for Member States and operators. The preferred option was option 2, balancing flexibility and harmonisation. It would introduce strengthened sustainability requirements and contingency planning that would be mandatory but flexible; derogations for the registration of the basic material for forest genetic resources; harmonisation of official controls and simplified import controls; and basic rules combined with empowering the Commission to detail rules on innovation and digitalisation.

The IA received a positive [opinion](#) with reservations from the Regulatory Scrutiny Board. The [EPRS initial appraisal](#) of the impact assessment concluded that the measures set out in the proposals are

coherent with the preferred option identified in the IA. It notes, however, that the preferred option was chosen based on a qualitative rather than quantitative analysis, and that the IA acknowledged the gaps in the data and the cost-benefit analysis.

The changes the proposal would bring

The proposal comprises the following main elements:

- **Scope** – the new regulation would apply not only to FRM important for forestry purposes but also to FRM used for the purposes of wood and biomaterials production, biodiversity conservation, restoration of forest ecosystems, climate adaptation, climate mitigation and conservation and sustainable use of forest genetic resources. However, while the current directive covers tree species and artificial hybrids important for forestry purposes in all or part of the EU – and 'in particular those listed in Annex I', according to the proposal – only the species and hybrids listed in Annex I would be covered. The Commission would be empowered to amend the list;
- **Sustainability of basic material** – the competent authorities would have to assess the basic material's sustainability characteristics. The trees would have to be well-adapted to the climatic and ecological conditions (including to the biotic and abiotic factors prevailing in the region of provenance) and free of pests and their symptoms;
- **Conserving forest genetic resources** – it would be possible to register basic material intended for conserving forest genetic resources in the national registers without an approval by the competent authorities. Instead, professional operators would be able to notify the basic material to the competent authorities through FOREMATIS. It would be possible to harvest only source-identified FRM from such basic material, provided it is naturally adapted to the local and regional conditions and collected from all individual trees of the notified basic material;
- **Information for end users** – professional operators would be required to provide potential buyers with all necessary information concerning the suitability of the FRM for the current and projected future climatic and ecological conditions. This could be done through websites, planters' guides or by other means;
- **National contingency plans** – Member States would be required to establish contingency plans for the species and artificial hybrids in their national registers. The contingency plans would aim to ensure a sufficient supply of FRM to reforest areas affected by extreme weather events, wildfires, disease and pest outbreaks, disasters and other events. All relevant stakeholders would have to be consulted in drawing up these plans and keeping them up to date;
- **Digitalisation** – national registers, national lists and the EU list would be kept in electronic form. Master certificates, issued after harvesting the FRM, and the official label, issued for every lot of the FRM, could also be in electronic form;
- **Registration of professional operators** – professional operators would have to be established in the EU and registered in the official national registers set up by Member States for the purposes of the Plant Health Law. They would also need to adhere to a number of provisions concerning pests in that regulation;
- **Official label** – the 'supplier's label' would become the 'official label'. Competent authorities could authorise professional operators that possess the necessary infrastructure and resources to print the official label. This authorisation would be based on an audit and regular controls. It would also be possible to combine the official label with the plant passport as defined in the Plant Health Law;
- **Official controls** – FRM would be added to the scope of the Official Controls Regulation.

Advisory committees

The European Economic and Social Committee (EESC) adopted its [opinion](#) on the proposal on 12 December 2023 (rapporteur: Arnaud Schwartz, Group III / France). The EESC supports the proposed administrative simplification. However, it recommends setting up a mechanism to monitor and assess the reduction of red tape for operators in order to identify possible persistent obstacles and take corrective action to remove them. The EESC also welcomes the proposal to strengthen the assessment of sustainability characteristics of basic material and the rules to make it easier to conserve endangered forest genetic resources.

National parliaments

The [deadline](#) for the submission of reasoned opinions on the grounds of subsidiarity was 8 December 2023. No reasoned opinions were submitted.

Stakeholder views¹¹

The **European Forest Nurseries Association (EFNA)** said that the current directive has been working well and that there was no need to transform it into a regulation. It noted that the current rules already ensure most of the goals of the Commission's proposal, including the production and marketing of high-quality FRM in EU, the functioning of the internal market, supporting resilient forests and biodiversity and restoring forest ecosystems. EFNA argued that Member States can lay down rules on the approval of the basic material for purposes other than forestry in national rules. It also considered that the proposed provisions on labelling were unworkable and that the rules should remain as they are now. It noted that forest nurseries have incurred considerable costs for the software and hardware for the current system of producing the 'supplier document', and that the introduction of the 'official label' will require additional investment.

The **European State Forest Association (EUSTAFOR)**, representing state forest management organisations, also opposed transforming the directive into a regulation, saying it prefers the implementation of the EU rules through national laws, as they take into account local circumstances. EUSTAFOR also did not support empowering the Commission to adopt delegated acts to change crucial parts of the proposal. It expressed particular concern about requiring the Commission to approve every new species to be added to Annex I, as this could create bottlenecks. Moreover, EUSTAFOR questions the need for each Member State to have a contingency plan, warning that in practice, this could result in a waste of resources, as nurseries could be asked to increase the production without extra demand. EUSTAFOR also called for the FRM legislation to be consistent with the PRM and rules on production of ornamental plants, so that operators could sell material approved as FRM for other purposes as well.

The **European Forest Genetic Resources Programme (EUFORGEN)**, an international cooperation programme that promotes the conservation and sustainable use of forest genetic resources in Europe, found articles 6 and 18 of the Commission's proposal particularly problematic, although there was no consensus among its members on how to deal with them. According to EUFORGEN, some of its members considered that article 6 on the marketing of FRM intended for conserving forest genetic resources was unnecessarily restrictive and could significantly limit the use of FRM for genetic conservation purposes. EUFORGEN's position paper offers different possibilities for deleting or amending different paragraphs of the article. EUFORGEN also raised the question of suitability of article 18 on the derogation from the approval of basic material for the purpose of conserving forest genetic resources. While some EUFORGEN members argued that the derogation should be kept or amended, others called for its deletion, quoting concerns about a possible loss of traceability and transparency and the potential to facilitate fraud.

[Copa-Cogeca](#), which represent **EU farmers and cooperatives**, mainly focused on the PRM proposal. However, regarding FRM, they called for the list of tree species and artificial hybrids in Annex I to be expanded.

The **European Landowners Association (ELO)** highlighted several key areas where the proposal could be improved. It suggested, for instance, that the definition of FRM is too limited and should include critical components such as parts of plants, planks and forest seedlings; and that many important forest species are excluded from Annex I, including for instance 17 species regulated in France.

Legislative process

In the European Parliament, the file was referred to the Committee on Agriculture and Rural Development (AGRI), with Herbert Dorfmann (EPP, Italy) as rapporteur. The Committee on the Environment, Public Health and Food Safety (ENVI) is associated under Rule 57 with some shared and some exclusive competences (mainly for the articles concerning the registration of genetically modified organisms, plants obtained by certain new genomic techniques and plant variety rights).

The rapporteur put forward his [draft report](#) on 10 November 2023. It proposes several changes to the Commission's proposal, including:

- limiting the scope of the regulation to FRM for forestry purposes;
- allowing FRM intended for conservation purposes to be collected from a maximum number of individuals of the notified basic material (instead of *all* individuals of the basic material), taking into account natural conditions and organisational and financial capacities;
- allowing professional operators to issue the official labels accompanying individual lots of FRM under the supervision of the competent authority;
- introducing stricter rules for professional operators regarding the approval of the 'tested' category of basic material.

More than 300 [amendments](#) were submitted by the 4 December deadline. The vote in the AGRI committee is expected in March 2023.

In the Council, examination of the proposal is ongoing in the working party on genetic resources and innovation in agriculture. In December 2023, the Spanish Presidency published a [progress report](#) and a [presidency text](#) that takes into account the comments provided by delegations on the articles discussed until that time.

EUROPEAN PARLIAMENT SUPPORTING ANALYSIS

Caprile A., [New EU forest strategy for 2030](#), EPRS, February 2022.

Rakstelyte A., [Plant and forest reproductive material](#), EPRS, October 2023.

Šajn N., [Plant reproductive material](#), EPRS, December 2023.

OTHER SOURCES

European Parliament, [Production and marketing of forest reproductive material](#), Legislative Observatory (OEL).

ENDNOTES

- ¹ The package has also been referred to as the 'food and biodiversity package'.
- ² An additional 20 million hectares are covered by 'other wooded land'. For the definitions of forest area and other wooded land, see the Commission's [Agri-Food Portal](#).
- ³ According to the new EU forest strategy for 2030, this has happened thanks to natural processes, afforestation, sustainable forest management and active restoration.
- ⁴ Most of them worked in the furniture industry, followed by the manufacture of wood and wood and cork products and the paper industry. Slightly under 450 000 employed people and 95 000 self-employed worked in forestry and logging.
- ⁵ According to the EEA, although land-use change (making space for other activities) is the main factor contributing to tree canopy loss, EU forests are increasingly under strain from climate change. An [analysis](#) by the European Forest Institute showed that most of the forest damage caused by environmental factors since 1950s can be attributed to wind disturbances (46 %, with particularly high rates since the 1990s), forest fires (24 %), bark beetle infestation (almost 20 %) and pests and diseases (8 %).
- ⁶ According to the [EEA tracker](#), as of December 2023, a little over 13 million trees have been planted.
- ⁷ It applies to tree species and artificial hybrids that are important for forestry in the whole EU or particular Member States, and in particular those listed in Annex I to the directive. Member States can also apply the same, or less stringent, measures to other species important for the forestry on their territory.
- ⁸ Experts from the Commission can, in cooperation with the Member States' official bodies, make on-the-spot checks to ensure uniform application of the directive.
- ⁹ This information is not required if [small quantities of seed](#) are placed on the market.
- ¹⁰ Most of the questions were addressed to stakeholders with expert knowledge of the legislation; specific questions on FRM were answered by 271 participants.
- ¹¹ This section aims to provide a flavour of the debate and is not intended to be an exhaustive account of all different views on the proposal. Additional information can be found in related publications listed under 'European Parliament supporting analysis'.

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